Pacific Coast Commons Specific Plan
Final Environmental Impact Report

State Clearinghouse No. 2020050508

Prepared for:

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Table of Contents

SECTION **PAGE NO.**

1 PREFACE 1-1
1.1 Purpose 1-1
1.2 Format of the Final EIR 1-1
1.3 Environmental Review Process 1-2
1.3.1 Notice of Preparation 1-2
1.3.2 Noticing and Availability of the Draft 1-2
1.3.3 Final EIR 1-3
1.4 Revisions to the Draft EIR 1-3

2 RESPONSES TO COMMENTS 2-1
2.1 Introduction 2-1
2.2 Topical Responses 2-2
Response to Comment Letter A1 2-15
Response to Comment Letter O1 2-19
Response to Comment Letter O2 2-29
Response to Comment Letter O3 2-33
Response to Comment Letter O4 2-37
Response to Comment Letter I1 2-41
Response to Comment Letter I2 2-45
Response to Comment Letter I3 2-49
Response to Comment Letter I4 2-53
Response to Comment Letter I5 2-57
Response to Comment Letter I6 2-61
Response to Comment Letter I8 2-71
Response to Comment Letter I9 2-75
Response to Comment Letter I10 2-79
Response to Comment Letter I11 2-83
Response to Comment Letter I12 2-87
Response to Comment Letter I13 2-91
Response to Comment Letter I14 2-95
Response to Comment Letter I15 2-99
Response to Comment Letter I16 2-103
Response to Comment Letter I17 2-107
Response to Comment Letter I19 2-119
Response to Comment Letter I20 2-123
Response to Comment Letter I21 2-205
Response to Comment Letter I23 2-277

Response to Comment Letter I24 2-281
Response to Comment Letter I28 2-303
Response to Comment Letter I30 2-313
Response to Comment Letter I31 2-317

3 CHANGES TO THE DRAFT EIR 3-1
3.1 Introduction 3-1
3.2 Errata 3-1

4 MITIGATION MONITORING AND REPORTING PROGRAM 4-1

Appendix

A Revised Future Analysis

Tables

2-1 List of Commenters 2-1
2-2 Additional Related Projects 2-3
2-3 Draft EIR Future (2027) Plus Project Intersection LOS Signalized Intersections 2-9
2-4 Revised Future Plus Project Intersection LOS Signalized Intersections 2-10
2-5 Off-Site Roadway Traffic Noise Modeling Results 2-211
2-6 Measured Existing Outdoor Ambient Sound Pressure Levels (SPL) in Project Vicinity 2-221
4-1 Mitigation Monitoring and Reporting Program 4-2

1 Preface

1.1 Purpose

This Final Environmental Impact Report (EIR) has been prepared by the City of El Segundo (City) for the Pacific Coast Commons Specific Plan Project (Specific Plan or Project). This Final EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (Cal. Pub. Res. Code, Section 21000 et. seq., as amended) and implementing guidelines (Cal. Code Regs., Title 14, Section 15000 et. seq.).

Before approving a project, CEQA requires the lead agency to prepare and certify a Final EIR. The City has the principal responsibility for approval of the proposed Project and is therefore considered the lead agency under CEQA Section 21067. According to the CEQA Guidelines, Section 15132, the Final EIR shall consist of:

- The Draft EIR or a revision of the Draft EIR
- Comments and recommendations received on the Draft EIR either verbatim or in summary
- A list of persons, organizations, and public agencies commenting on the Draft EIR
- The responses of the lead agency to significant environmental points raised in the review and consultation process; and
- Any other information added by the lead agency

1.2 Format of the Final EIR

This Final EIR consists of the February 2021 Draft EIR and the following four chapters:

1 Preface. This chapter summarizes the contents of the Final EIR, the environmental review process, and several minor updates that occurred in the Draft EIR subsequent to the release of the Draft EIR for public review.

2 Response to Comments. During the 45-day public review period for the Draft EIR, 37 comment letters were received. This chapter contains these comment letters, which have been bracketed to organize the responses, and the City's responses to the comments as well as letters from the Southwest Carpenters and SAFER received by the City after the close of the public review period and responses to those comments.

3 Changes to the Draft EIR. Comments that are addressed in Chapter 2 may have resulted in minor revisions to the information contained in the February 2021 Draft EIR. Where necessary, deletions to the text are shown in ~~**bold strikeout**~~ and additions to the text are shown in **bold underline** in all applicable sections of the Draft EIR. Additionally, through the certification of this Final EIR, where the term "Draft EIR" is used in the text, this is now deemed to be "Final EIR."

4 Mitigation Monitoring and Reporting Program. This chapter of the Final EIR provides the mitigation monitoring and reporting program (MMRP) for the proposed Project. The MMRP is presented in table format and identifies mitigation measures for the proposed Project, the implementation period for each measure, the implementing party, and the enforcing agency. The MMRP also provides a section for recordation of mitigation reporting.

1.3 Environmental Review Process

1.3.1 Notice of Preparation

CEQA requires preparation of an EIR when there is substantial evidence supporting a fair argument that a proposed project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the environmental effects of the proposed project. The EIR process is intended to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of the proposed project, and to identify feasible mitigation measures and alternatives that would reduce or avoid the proposed project's significant effects. In addition, CEQA requires that an EIR identify adverse impacts determined to be significant after mitigation.

In accordance with the CEQA Guidelines, a Notice of Preparation (NOP) was circulated for a 30-day public review starting on May 26, 2020, to public agencies, organizations, and interested individuals. The purpose of the NOP was to provide notification that the City plans to prepare an EIR and to solicit input on the scope and content of the EIR. Additionally, a notice announcing the availability of the NOP was also published in the El Segundo Herald on May 21, 2020. Copies of the NOP were made available for electronic download on the City's website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects. Comments on the NOP were received from five agencies, seven letters/emails from individuals or groups, which are provided in Appendix A-2 to the Draft EIR.

A scoping meeting was held on June 10, 2020. Rather than conducting an in-person meeting, the Governor's Executive Order N-25-20 allowed local governments to hold meetings via teleconferencing while still meeting State transparency requirements. As such, the Project's Scoping Meeting was held online, through a webinar type format. The City hosted one Scoping Meeting on Wednesday, June 10, 2020, from 6:30 p.m. to 7:30 p.m. and was made available through the City's website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects. The purpose of this meeting was to seek input from public agencies and the general public regarding the potential environmental impacts of the proposed Project. The City received five comments/questions with environmental concerns during the Scoping Meeting, which are provided in the Draft EIR under Table A of Appendix A-2.

1.3.2 Noticing and Availability of the Draft

The Draft EIR was made available for public review and comment pursuant to CEQA Guidelines Section 15087. The 45-day public review period for the Draft EIR started on February 25, 2021 and ended on April 12, 2021. At the beginning of the public review period, an electronic copy of the Draft EIR and an electronic copy of the Notice of Completion (NOC) and Notice of Availability (NOA) were submitted to the State Clearinghouse. Relevant State agencies received electronic copies of the documents. An NOA was distributed to interested parties and filed with the Los Angeles County Clerk as well as published in the El Segundo Herald. The NOA described where the document was available and how to submit comments on the Draft EIR. A hardcopy of the Draft EIR was available at the El Segundo Development Services Department located at 350 Main Street, El Segundo, CA 90245. Additionally, the NOA and the Draft EIR were available to be viewed on the City website at https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects.

The 45-day public review period provided interested public agencies, groups, and individuals the opportunity to comment on the contents of the Draft EIR. A total of 37 agency, organization, and individual comment letters

were received and are included in Chapter 2, Responses to Comments, of this Final EIR. Additionally, two organizations submitted comment letters prior to the City's December 9, 2021 Planning Commission hearing as well as seven individuals provided public comment. As such, Responses to Additional Comments Received has been included as part of Chapter 2, Responses to Comments, of this Final EIR.

1.3.3 Final EIR

The Final EIR addresses the comments received during the public review period and includes minor changes to the text of the Draft EIR in accordance with comments that necessitated revisions. This Final EIR will be presented to City decision-makers for potential certification as the environmental document for the proposed project. All agencies who commented on the Draft EIR will be provided with a copy of the Final EIR, pursuant to CEQA Guidelines Section 15088(b). The Final EIR will also be posted on the City's website at: https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects.

Pursuant to CEQA Guidelines Section 15091, the City shall make findings for each of the significant effects identified in this EIR and shall support the findings with substantial evidence in the record. After considering the Final EIR in conjunction with making findings under Section 15091, the lead agency may decide whether or how to approve or carry out the Project. When a lead agency approves a project that will result in the occurrence of significant effects that are identified in the Final EIR but are not avoided or substantially lessened, the agency is required by CEQA to state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. Because the Project would result in significant and unavoidable impacts, a "statement of overriding considerations" will be prepared pursuant to CEQA Guidelines Section 15093 and supported by substantial evidence in the record.

1.4 Revisions to the Draft EIR

The comments received during the public review period for the Draft EIR resulted in minor clarifications and modifications in the text of the February 2021 Draft EIR, as shown in Chapter 3, Changes to the Draft EIR. These changes are included as part of the Final EIR, to be presented to City decision makers for review and consideration of certification and Project approval.

CEQA Guidelines Section 15088.5 identifies when a lead agency must recirculate an EIR. A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the Draft EIR but before certification of the Final EIR. Information includes changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not considered 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. As defined in CEQA Guidelines Section 15088.5(a), significant new information requiring recirculation includes the following:

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.

The minor clarifications, modifications, and editorial corrections that were made to the Draft EIR are shown in Chapter 3, Changes to the Draft EIR, of this Final EIR. None of the revisions that have been made to the Draft EIR resulted in new significant impacts; none of the revisions resulted in a substantial increase in the severity of an environmental impact identified in the Draft EIR; and, none of the revisions brought forth a feasible project alternative or mitigation measure that is considerably different from those set forth in the Draft EIR. Furthermore, the revisions do not cause the Draft EIR to be flawed such that it precludes meaningful public review. As none of the CEQA criteria for recirculation have been met, recirculation of the EIR is not warranted. As stated in CEQA Guidelines Section 15088.5(b), "recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR."

1 PREFACE 1
1.1 Purpose 1
1.2 Format of the Final EIR 1
1.3 Environmental Review Process 2
1.3.1 Notice of Preparation 2
1.3.2 Noticing and Availability of the Draft 2
1.3.3 Final EIR 3
1.4 Revisions to the Draft EIR 3

2 Responses to Comments

2.1 Introduction

A draft version of the Environmental Impact Report (EIR) for the proposed Pacific Coast Commons Specific Plan (Project) was circulated for a 45-day public review from February 25, 2021 to April 12, 2021. This chapter of the Final EIR includes a copy of each comment letter provided during the 45-day public review period for the Draft EIR. The City of El Segundo (City) has prepared responses to each comment, which are included in this chapter. The comments are ordered numerically, and the individual issues within each comment letter are bracketed and numbered. The City's responses to comments on the Draft EIR represent a good-faith, reasoned effort to address the environmental issues identified by the comments. Under the CEQA Guidelines, the Lead Agency is required to evaluate and provide written responses to comments received on the Draft EIR (CEQA Guidelines, Section 15088).

As shown in Table 2-1 the City received comment letters from 1 agency, 4 organizations, and 32 community members. To finalize the EIR for the proposed Project, responses have been prepared for comments that were received during the public review period. In addition to providing individual responses to comments, one Topical Response has been prepared to respond to consistent comments raised by multiple commenters. When a commenter has made a comment that can be responded to using a Topical Response, the commenter is referred to the applicable Topical Response(s). For ease of reference, Topical Responses are included at the beginning of this Response to Comments chapter. In accordance with the requirements of CEQA Guidelines Section 15088(b), the City will provide a written response on comments submitted by public agencies to each respective public agency at least 10 days prior to certifying the Final EIR.

Table 2-1. List of Commenters

Comment Letter	Name	Type	Date
Agencies			
A1	Caltrans	Regional Agency	March 26, 2021
Organizations			
O1	CREED LA	Organization	March 8, 2021
O2	Attorneys for Southwest Regional Council of Carpenters	Organization	March 22, 2021
O3	Supporters Alliance for Environmental Responsibility ("SAFER")	Organization	April 12, 2021
O4	Sam Dunlap	Tribe	April 10, 2021
Individuals			
I1	BYDS Chow	Individual	February 27, 2021
I2	Wendy Martin	Individual	February 28, 2021
I3	Paul Morrison	Individual	March 1, 2021
I4	Susannah Harper	Individual	March 2, 2021
I5	Laura Honsowetz	Individual	March 3, 2021
I6	Jed Montgomery	Individual	March 12, 2021
I7	Richard Leos	Individual	March 19, 2021
I8	Chris Johnson	Individual	March 20, 2021
I9	Jed Montgomery	Individual	March 20, 2021

Table 2-1. List of Commenters

Comment Letter	Name	Type	Date
I10	Antoine Michael	Individual	March 21, 2021
I11	McKenna Wilson	Individual	March 22, 2021
I12	Stephanie Jordan and Brenton C. Graham	Individual	March 22, 2021
I13	Maggie Matchett	Individual	March 22, 2021
I14	Lizabeth Allen	Individual	March 22, 2021
I15	Paul and Cami Trump	Individual	March 26, 2021
I16	Neil R. Cadman	Individual	March 26, 2021
I17	Frank Glynn	Individual	March 26, 2021
I18	Frances de Freitas	Individual	March 28, 2021
I19	Stephanie Sauter and Paul Kelly	Individual	March 28, 2021
I20	Bill Watkins	Individual	March 29, 2021
I21	Matthew Klemp	Individual	April 1, 2021
I22	Venu Joshi	Individual	April 5, 2021
I23	Jim deCordova	Individual	April 8, 2021
I24	Julia Riboli	Individual	April 9, 2021
I25	Bianca Mendoza	Individual	April 11, 2021
I26	Paul Morrison	Individual	April 11, 2021
I27	David S. Poepoe and Stephanie Young	Individual	April 11, 2021
I28	Eli Buck	Individual	April 12, 2021
I29	Eli Buck	Individual	April 12, 2021
I30	Gayle CdeBaca	Individual	April 12, 2021
I31	Stephanie Jordan and Brenton C. Graham	Individual	April 12, 2021
I32	Lionel Uhry	Applicant	April 12, 2021

2.2 Topical Responses

Topical Response No. 1 – Cumulative Impacts

In response to comments regarding the listing of cumulative projects included in the Draft EIR, an additional three development projects identified by the City of El Segundo have been added to the cumulative projects list. Table 2-2, Additional Related Projects, below, represents three additional projects that were reasonably foreseeable at the time of the issuance of the Notice of Preparation of the Draft EIR. These projects are hereby incorporated into Table 2-3, List of Cumulative Projects, within Draft EIR Chapter 2. Please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR, for revisions. These edits do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures, as further demonstrated in the analysis below. Rather, this information merely augments the discussion that was already presented in the Draft EIR, and results in no changes to the conclusions or mitigation measures previously presented. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

Table 2-2. Additional Related Projects

Location ID	Related Project Location	Within City Limits	Land Use/Project Type	Unit	Size
31	1475 El Segundo Boulevard	Yes	Office	47.84	KSF
			Residential	4	DU
32	1320-1330 Franklin Avenue	Yes	Office	47.25	KSF
			Residential	4	DU
33	243 and 330 Kansas Street	Yes	Office	243.22	KSF

Note: DU = dwelling unit; KSF = thousand square feet

This Topical Response provides an assessment of these three additional related projects into the analysis of each topical sections assessed in the Draft EIR, as described below.

Aesthetics

As described in the Draft EIR (Section 4.1.5), the City is almost entirely built out, and cumulative projects within the City would be considered infill development. As further stated in Section 4.1.5, cumulative projects would not have a substantial adverse effect to existing scenic views of resources. The addition of the three related projects listed in Table 2-2 would not change this conclusion. Consistent with the other related projects listed in the Draft EIR, these three additional projects are infill, redevelopment projects in a highly urbanized area. They are located within the City, which does not identify any officially designated scenic vistas within City boundaries, and are not within the vicinity of the Santa Monica Mountains, San Gabriel Mountains, the coastline, or beaches. For the same reasons identified in the Draft EIR, cumulative projects would not have a substantial adverse effect to existing scenic views, and the newly added related projects would not change this conclusion.

With regard to scenic quality, the Draft EIR states that the proposed Project would have less than significant impacts on the scenic quality of the area and that no identified cumulative projects are within close proximity to the Project site such that combined effects could occur. While this analysis would remain the same for the revised related projects list provided in this Final EIR, one of the newly added related projects is situated closer to the Project site than the closest related project identified in the Draft EIR.[1] This more proximal related project is located at 243 and 330 Kansas Street. The northern boundary of this related project is located along Holly Avenue, approximately 0.15-mile west of the proposed Project's southern boundary along Holly Avenue. However, the sloping topography of Holly Avenue between the proposed Project site and the related project site, combined with the distance between the two projects, intervening development, two-way roadway, landscaping, and utility lines, would minimize the potential for the two projects to combine within one viewshed to change the scenic quality of the area. As such, the proposed Project and the newly added proximal related project would not result in a significant impact to scenic quality.

As the related projects are implemented, a more dense and urban character would occur within the City, as described in Section 4.1.5 of the Draft EIR. The addition of three related infill development projects to the Draft EIR's original list of 30 related infill development projects would not substantively alter the overall pattern of increased density and urbanization described in the Draft EIR. The three additional projects would be consistent with overall land use patterns and trends in the Project vicinity and would be required to comply with development

[1] By way of comparison, the closest related project identified in the Draft EIR is located at 455 Continental Boulevard & 1995 E Grand Avenue, which is over 0.3 mile southeast of the Project site. The related project at 243 and 330 Kansas Street is located approximately 0.15 mile southwest of the Project site. (The other two newly added related projects listed in Table 2-2 above are located in similar proximities to the Project site as the related projects identified in the Draft EIR.)

standards from the El Segundo Municipal Code and with applicable scenic quality regulations. Impacts related to conflicts with scenic quality regulations would remain less than significant, for the same reasons as identified in the Draft EIR.

With regard to shade/shadow, such impacts are site specific, and the geographic area of potential shade/shadow impacts is thus located within the immediate vicinity of the Project site. The distance between this related project and the Project site, as well as the intervening features, would preclude the shade/shadow impacts of the two projects from combining to produce a cumulative impact. Impacts would remain less than significant, and the newly added related projects would not change this conclusion.

As determined in the Draft EIR, upon compliance with applicable regulations and guidelines regarding light and glare, the proposed Project would not result in a cumulatively considerable light/glare impact. The related projects (including the three additional projects identified herein) would be subject to similar regulations and are infill projects within an already urbanized area. The addition of three related infill development projects to a list of 30 other infill development projects in an urbanized area would not change the conclusions regarding light/glare that are presented in the Draft EIR. Impacts would therefore remain less than significant, and the newly added related projects would not change this conclusion.

Air Quality / Greenhouse Gas Emissions

Cumulative impacts to air quality from construction and operation of the Project and other past, present, and reasonably foreseeable projects were discussed in Draft EIR Section 4.2, Air Quality. Under Threshold 4.2b and under Section 4.2.5, Cumulative Impact Analysis, the Draft EIR states if a project does not exceed the South Coast Air Quality Management District (SCAQMD) recommended daily regional or localized emission thresholds for criteria pollutants, then project-specific impacts would also not result in a cumulatively considerable increase in emissions. While the proposed Project would contribute emissions for both short-term construction and long-term operations, its emissions would not exceed the SCAQMD's criteria pollutant threshold for criteria air pollutant emissions; therefore, the Project's contribution would not be cumulatively considerable. Furthermore, other projects would also be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the project would exceed SCAQMD thresholds. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. In addition, cumulative VOC emissions would be subject to SCAQMD Rule 1113 (Architectural Coatings).

Additionally, a localized significance thresholds (LSTs) analysis was prepared to determine potential impacts to nearby sensitive receptors during construction of the Project. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-specific level projects. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways and only assess emissions generated from onsite sources. As previously discussed, the SCAQMD has promulgated guidance that if daily emissions generated by construction or operation of a project remain below the regional or localized mass daily thresholds, those emissions would not result in a significant air quality impact either at the project level or under regionally cumulative considerations. Project-related construction activities would not generate emissions in excess of site-specific LSTs as described under Threshold 4.3c in Section 4.2, Air Quality; therefore, site-specific impacts during construction and operation of the proposed Project would be less than significant and therefore, would not result in a cumulatively considerable increase in emissions of

nonattainment pollutants. Therefore, even with consideration of the additional related projects, the proposed Project's air quality emissions would be less than significant.

Likewise, with greenhouse gas (GHG) emissions, impacts are inherently cumulative as described in Draft EIR Section 4.6, as no single project could cause global climate change. The proposed Project was determined to result in emissions less than the significance threshold and would also be consistent with the City's Climate Action Plan. Therefore, even with consideration of the additional related projects, the proposed Project's GHG emissions would be less than significant.

Cultural Resources

As stated in the Draft EIR (Section 4.3.5), there are no known historical or archaeological resources on the Project site and as such, the Project site is not part of an existing or known grouping or district of historical or archaeological resources that would be impacted as part of the cumulative impacts of other projects. The addition of three related projects to the related projects list would not change this conclusion. The proposed Project site does not support significant historic built environment resources; as such, the Project would not have the potential to combine with any of the related projects (including the additional three projects identified herein) to produce a cumulatively considerable impact on historic built environment resources.

As identified in the Draft EIR, there is the potential for accidental discovery of archaeological resources during excavation activities associated with the proposed Project and the related projects, including those that have been added in this Final EIR. MM-CUL-2 identified in the Draft EIR would address the proposed Project's potential impacts related to inadvertent finds of archaeological resources. Other individual projects occurring in the vicinity of the Project site would also be subject to the same requirements of CEQA as the proposed Project and any impacts to archaeological resources would be mitigated, as applicable. The addition of three related projects to the list originally identified in the Draft EIR would not change this conclusion.

The potential for effects to human remains from the proposed Project and related projects (including the three additional related projects identified herein) would continue to be addressed by compliance with applicable regulations, as identified in the Draft EIR. Effects to human remains would not be cumulatively considerable, for the same reasons set forth in the Draft EIR. Therefore, even with consideration of the additional related projects, the proposed Project's impacts to cultural resources would be less than significant.

Energy

As stated in the Draft EIR (Section 4.4.5), buildout of the proposed Project and the related projects would increase demands for energy (electricity, natural gas, and petroleum). The addition of the three related projects identified in Table 2-2 would marginally increase the energy demands of the overall cumulative development scenario. As stated in Section 4.4.5, the proposed Project and the related projects would be subject to increasingly stringent energy efficiency requirements and are also expected to reduce vehicle miles traveled (VMT) by encouraging the use of alternative modes of transportation and other design features that promote VMT reductions. The three additional related projects would be subject to the same energy efficiency requirements as the other related projects and may also promote reductions in VMT through provision of jobs and housing in an already urbanized area. As such, the addition of three related projects to the overall cumulative scenario would not change the conclusions or the analysis presented in the Draft EIR in the category of energy.

Geology and Soils

As stated in the Draft EIR (Section 4.5.5), the majority of impacts from geologic hazards, such as rupture of a fault line, liquefaction, landslides, expansive soils, and unstable soils, are site-specific and are therefore generally mitigated on a project-by-project basis. Each related project would be required to adhere to required building engineering design per the most recent version of the California Building Code in order to ensure the safety of building occupants and avoid a cumulative geologic hazard. Additionally, as needed, projects would incorporate individual mitigation or geotechnical requirements for site-specific geologic hazards present on each individual cumulative project site. The addition of three related projects to the originally identified list in the Draft EIR would not change the cumulative impacts conclusions included in the Draft EIR.

With regard to paleontological resources, MM-GEO-1 would ensure that the Project's potential impacts to paleontological resources would be less than significant. Other cumulative projects that would have a potential to impact soils that are sensitive for significant fossils would also require mitigation, including the three additional projects listed in Table 2-2. The newly added related projects would not alter the cumulative impacts conclusions related to paleontological resources that was presented in the Draft EIR.

Hazards and Hazardous Materials

As stated in the Draft EIR (Section 4.7.5), cumulative projects would be subject to federal, state, and local regulations related to hazardous materials and other public health and safety issues. Adherence to these regulatory requirements would reduce incremental impacts associated with public exposure to health and safety hazards in the vicinity of each related project. Furthermore, hazards and hazardous materials impacts are generally site specific. For these reasons, the Draft EIR concludes that cumulative impacts associated with hazards and hazardous materials would be less than significant. The three additional related projects would not change the impacts or conclusion, as these additional related projects would be subject to the same federal, state, and local regulations related to hazardous materials that are identified in the Draft EIR. Furthermore, as stated in Section 4.7.5, the proposed Project itself would not create significant human or environmental health or safety risk that could combine with other project impacts to create a significant and cumulatively considerable impact. For these reasons, the proposed Project would not result in cumulatively considerable impacts related to hazards and hazardous materials, and the newly added related projects would not change this conclusion.

Hydrology and Water Quality

The cumulative scenario for water quality that is analyzed in the Draft EIR (Section 4.8.5) encompasses the geographic context of the South Santa Monica Bay Watershed and accounts for all anticipated cumulative growth within this geographic area. As such, the analysis is regional in nature and is not altered by the addition of the three related projects listed in Table 2-2. As with the other related projects identified in the Draft EIR, the additional related projects are infill development projects that could temporarily increase sedimentation during construction and could increase impervious surfaces during operations. However, the same water quality regulations identified in the Draft EIR would apply to the newly added related projects. For the same reasons stated in the Draft EIR, Project impacts associated with water quality standards and polluted runoff would be less than significant, and the Project would not contribute considerably to cumulative impacts. The newly added related projects would not change this conclusion.

The cumulative impact analysis for drainage that is analyzed in the Draft EIR discusses cumulative development in the City and its potential to increase impervious surfaces that could cause or contribute to storm drain system

capacity exceedance, alter the existing storm drain system, and/or require construction of new or expanded facilities. However, as stated in the Draft EIR, new development would be subject to the same requirements for low impact development infrastructure and best management practices to address the potential for increased runoff from development sites. All projects must comply with current state and local environmental regulations, such as the El Segundo Municipal Code mandates. The related projects that are added to the cumulative development scenario would be subject to these same regulations. Furthermore, these three additional projects are redevelopment projects located on existing urbanized, developed sites. As such, they would not be expected to contribute to an increase in impervious surfaces. For the same reasons identified in the Draft EIR, potential impacts to drainage associated with the Project would be less than significant, and the Project would not contribute considerably to cumulative impacts. The newly added related projects would not change this conclusion.

Land Use and Planning

As stated in the Draft EIR (Section 4.9.5), cumulative land use impacts could occur if any of the related projects would result in incompatible land uses, or result in land uses that are inconsistent with adopted land use plans when combined with the impacts of the Project. Given the built-out conditions of the greater Los Angeles Metropolitan region, including the Project site, the Draft EIR states that cumulative development would likely convert existing underutilized properties in the Project area to revitalized higher-density developments to respond to the need for housing, sources of employment, and associated retail land uses. The three newly added related projects fit into this pattern of cumulative development that is described in the Draft EIR. As further stated in the Draft EIR, land use conflicts are typically site-specific and not cumulative in nature; despite the number of cumulative projects in a given area, they would not necessarily compound to create cumulative land use conflicts. As such, the addition of the three related projects would not change the cumulative analysis or conclusions presented in the Draft EIR for land use and planning. Cumulative impacts related to land use and planning would thus remain less than significant for the same reasons identified in the Draft EIR. The newly added related projects would not change this conclusion.

Noise

The addition of three related projects would not change the impact determinations for noise as addressed in Draft EIR Section 4.10, Noise. While these three additional projects would have the potential to incrementally increase construction and operational noise intensity in the Project area, they would not change the Project's potential for contributing to cumulative effects. The three additional related projects are not directly adjacent to the Project site. As such, the proposed Project would not contribute to or overlap with localized noise and vibration effects associated with these projects.

By way of example, construction of the 243 and 330 Kansas Street related project (the nearest of the three additional projects) would appear to have existing noise-sensitive residential receptors at the northwest corner of E. Holly Avenue and Kansas Street that are as close as approximately 140 feet; however, these offsite receptors are 700 feet from the Project site. Since implementation of the Project and its component site-specific development, as well as unrelated development projects within its vicinity would all be subject to applicable noise standards, this means that construction noise from 243 and 330 Kansas Street would need to meet the City's construction noise threshold of 65 dBA at these offsite receptors 140 feet away. But because construction noise from the Project needs to comply with 65 dBA at its nearest offsite receptors, which include those at the northwest corner of E. Holly Avenue and Indiana Street that are less than 65 feet from the Project boundary, the Project construction noise exposure level at the Kansas Street receptors would be much less due to the additional 640 feet of distance travelled. With each doubling of distance representing a 6 dB reduction, the 65 dBA construction

noise level at the Indiana Street receptor would thus be at least 18 dB less (i.e., -6 dB at 130 feet, -12 dB at 260 feet, and -18 at 520 feet) and consequently a negligible acoustic contributor compared to what may be concurrent construction noise from 330 Kansas Street at these receptors. The same conclusion could be made for the offsite receptors at Indiana Street, because they are 700 feet from the 243 and 330 Kansas Street related project and would similarly receive an acoustically negligible contribution to the cumulative noise level. Such contribution is considered negligible in this context due to the principles of acoustical energy logarithmic summation: in summary, when two noise levels received at a common receptor are more than 10 dB apart, the result is effectively the larger of the two values. Both construction of the Project and the 243 and 330 Kansas Street related project could occur concurrently and individually comply with the City's construction noise standard, and each would not contribute to cumulative exceedances of noise standards of the other. Therefore, the incremental noise effect would remain as a less-than-significant impact with mitigation incorporated (included as MM-NOI-1) for Project construction noise.

Future development from implementation of the Project along with other projects would generate off-site traffic noise; however, even with increased traffic volumes, the noise generated from the three additional related projects would not represent a new significant impact. For instance, the predicted peak-hour traffic volumes for selected roadway intersections that include the effect of adding these three related projects to the cumulative and cumulative-plus-Project scenarios were numerically compared to earlier future traffic volumes used as inputs for studied roadway segments in the Draft EIR's Appendix J-1. The largest differences in total peak hour traffic, predicted to occur in the afternoon, at the Pacific Coast Highway intersections with E. Mariposa Avenue and E. Palm Avenue, result in no greater than a 0.09 dB increase in predicted traffic noise for the cumulative scenario and no greater than a 0.35 dB increase for the cumulative-plus-Project scenario. On these bases, and with no changes to roadway vehicle speeds or other modeling parameters, cumulative off-site traffic noise impacts would remain less than significant. Therefore, even with consideration of the additional related projects, the proposed Project's noise emissions would be less than significant.

Population and Housing

The cumulative population and housing analysis in the Draft EIR (Section 4.11.5) identifies two related projects that would contribute new residential units to the City: the projects at 540 E. Imperial Avenue and 1225 Mariposa Avenue. Two of the three newly added related projects (shown in Table 2-2 above) would contribute over 300,000 sf of office land uses and a total of eight new residential units to the City, in addition to the other related projects described in the Draft EIR. As such, these three projects would contribute primarily to the employment-generating uses within the City, which could further exacerbate the need for additional local housing stock. The three related project's new units would be small (e.g., approximately 500 sf) and are intended for the caretakers of the commercial properties, such as for security guards or others that need to stay overnight. The addition of 8 units intended to serve the planned office uses for the three new related projects would not be a substantial change in the context of cumulative housing and population growth for the City.

The Draft EIR further states that the related projects would primarily increase employment in the City. The three newly added related projects primarily consist of office uses and, therefore, would contribute to this overall pattern. Furthermore, as mentioned in the Draft EIR, the City is jobs rich and the eight new units proposed to serve the new office projects would not help to balance the jobs-to-housing ratio in the City. With or without the three additional related projects, the proposed Project would provide additional housing in a jobs-rich area. For the same reasons described in the Draft EIR, it is not anticipated that the proposed Project, in combination with other future foreseeable projects, would create a cumulatively considerable impact to population, housing, or employment. The newly added related projects would not change this conclusion and may in fact further support the need for the proposed Project's residential uses to facilitate a more balanced jobs-housing community.

Public Services and Recreation

The cumulative analysis for public services and recreation presented in the Draft EIR (Section 4.12.5) states that cumulative impacts to fire protection, police protection, schools, parks and recreational facilities, and other public facilities such as libraries would be generally addressed through development fees from the related projects. The addition of three related projects to the overall cumulative development scenario would incrementally increase demands on services but would also represent a commensurate increase in fees. As such, the analysis and conclusions in the Draft EIR would not change, and cumulative impacts would remain less than significant for the same reasons identified in the Draft EIR. The newly added related projects would not change this conclusion.

Transportation

The addition of three related projects would not change the impact significance conclusions as addressed in Draft EIR Section 4.13, Transportation. As described in Draft EIR Sections 4.6, Greenhouse Gas Emissions; 4.9, Land Use and Planning; and 4.13, Transportation, the proposed Project is consistent with plans addressing the circulation system (SCAG's 2020-2045 RTP/SCS, the City's Climate Action Plan, Metro's Long Range Transportation Plan, and LADOT's Short Range Transit Plan) and would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities under cumulative conditions. The addition of three related projects would not change the proposed Project's proximity to public transit and the Project (and other related projects) would cumulatively contribute to transit ridership maintained by Metro and LADOT, which would result in less than significant impacts.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). Therefore, as stated in the Draft EIR, the City's LOS policy in the General Plan would not be applicable per Senate Bill (SB) 743; however, a discussion of the changes in the LOS analysis due to the inclusion of the three additional related projects is provided below for informational purposes.

The addition of the three related projects listed in Table 2-2 above is anticipated to change the LOS of the intersection at Pacific Coast Highway/El Segundo Boulevard in the AM peak hour from LOS D to LOS E, as shown in the attached memorandum (see Appendix A) to this Final EIR (Fehr & Peers 2021). Prior to the addition of these related projects, this intersection was forecast to operate at LOS D in the AM peak hour, as shown in Table 2-3. With the addition of the three related projects, this intersection is forecast to operate at LOS E in the AM peak hour, as shown in Table 2-4.

Table 2-3. Draft EIR Future (2027) Plus Project Intersection LOS Signalized Intersections

No.	Intersection	Peak Hour	Future (2027)		Future plus Project	
			V/C	*LOS*	*V/C*	*LOS*
6	Pacific Coast Highway/El Segundo Boulevard	AM	0.867	D	0.877	D
		PM	1.115	F	1.117	F

Source: Fehr & Peers, 2020 (Appendix J-1); adapted from Table 8A
Note: V/C = volume to capacity; LOS = Level of Service

Table 2-4. Revised Future Plus Project Intersection LOS Signalized Intersections

No.	Intersection	Peak Hour	Future (2027)		Future plus Project	
			V/C	*LOS*	*V/C*	*LOS*
6	Pacific Coast Highway/El Segundo Boulevard	AM	0.901	E	0.908	E
		PM	1.170	F	1.172	F

Source: Fehr & Peers, 2021
Note: V/C = volume to capacity; LOS = Level of Service

This changed future LOS condition would occur with or without the proposed Project. Importantly, the addition of the proposed Project would not individually contribute to an LOS change from the pre-Project condition. In summary, the addition of the three related projects would not result in the Project creating adverse circulation conditions regarding trips generated on the street network.

Additionally, the addition of three related projects would not result in a cumulatively significant impact related to VMT. As stated in Section 4.13, Transportation of the Draft EIR, the City has not yet adopted VMT guidelines, metrics, and significance criteria per SB 743 guidelines. As such, the impact thresholds used for this Project are based on the Governor's Office of Planning and Research (OPR) guidelines outlined in their Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018). As shown in Table 4.13-3 of the Draft EIR, the Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita (12.1 VMT). Per OPR guidelines, "…A project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa…" Per the VMT analysis, the Project's VMT of 10.9 VMT falls below the efficiency-based threshold of 12.1 VMT, and the Project site is located within an urbanized area served by public transit. As such, the Project would not exceed the SCAG threshold for VMT and the Project's contribution to cumulative VMT would not be cumulatively considerable.

Finally, the addition of three related projects would not result in a cumulatively considerable significant impact related to emergency access. As with the proposed Project, driveways and/or circulation modifications proposed in the surrounding area would comply with applicable local, regional, state, and/or federal requirements. Further, since modification to access is largely confined to the Project site and the immediate surrounding area, Project-specific emergency access impacts would likely not impact other cumulative projects. Therefore, even with consideration of the additional related projects, the proposed Project's transportation impact conclusions would remain less than significant as stated in Draft EIR Section 4.13.

Tribal Cultural Resources

As stated in the Draft EIR (Section 4.14.5), cumulative impacts on tribal cultural resources consider whether impacts of the proposed Project together with other related projects identified within the vicinity of the Project site, when taken as a whole, substantially diminish the number of such resources within the same or similar context or property type. As discussed in the Draft EIR, there are no known tribal cultural resources on the Project site and the area is considered to be of low potential to contain unanticipated cultural or tribal cultural resources. Furthermore, mitigation measure MM-TCR-1 is set forth for the proposed Project to address the potential for inadvertent finds during excavation. The related projects would be subject to the same requirements of CEQA as the proposed Project and any impacts to tribal cultural resources would be mitigated, as applicable. The three related projects that have been added to the cumulative scenario are also subject to the same requirements, and mitigation would be applied

if necessary. As stated in the Draft EIR, impacts would not be cumulatively considerable after the Project-specific mitigation measure is applied. The newly added related projects would not change this conclusion.

Utilities and Service Systems

As stated in Section 4.15.5 of the Draft EIR, the proposed Project and each cumulative project would incrementally increase demands for utilities and service systems. The analysis in the Draft EIR demonstrates that available capacity exists to serve the proposed Project's water, wastewater, electricity, natural gas, telecommunications, and solid waste disposal needs. Similar to the Project, the capacity and availability of utilities to serve the related projects would be determined on a project-specific basis. In the event that upgrades are required due to cumulative projects, all construction work would be subject to local municipal code and applicable agency requirements, and would be subject to CEQA review accordingly. Furthermore, increases in water demand would be analyzed relative to the available supply outlined in the applicable Urban Water Management Plan and the increase in sewer generation for related projects located in the City would be governed under Title 12 of the El Segundo Municipal Code, which regulates public sewer facilities. The three newly added related projects would be subject to these same requirements and would also undergo analysis for utilities capacity on a project-specific basis. For the same reasons described in the Draft EIR, the Project's impacts to utilities and service systems would not be cumulatively considerable, and the newly added related projects would not change this conclusion.

Other Environmental Topics

With regard to cumulative impacts for the other environmental topics addressed in the Draft EIR, the addition of the three related projects described above would not change any impact determinations. While these projects would incrementally increase development intensity in the Project area, they would not change the Project's potential for contributing to cumulative effects. The three additional cumulative projects are not directly adjacent to the Project site. As such, the proposed Project would not contribute to or overlap with localized effects associated with these projects. Compliance with local and regional policies and regulations, combined with on-going monitoring of service levels for public services, utilities, and infrastructure, would preclude the Project from creating a cumulatively considerable impact, with or without the addition of the three above projects to the cumulative development scenario. Additional details are provided above for the other environmental topics addressed in the Draft EIR.

Conclusion

As outlined above, no new or different impacts requiring new or different mitigation would be required as a result of the additional related projects. No changes are required to the analysis or conclusions within the Draft EIR. No significant new information regarding the additional related projects within the meaning of CEQA Guidelines Section 15088.5 is presented herein, and as such, recirculation of the Draft EIR is not necessary.

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Comment Letter A1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7- OFFICE OF REGIONAL PLANNING
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0067
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

March 26, 2021

Paul Samaras
City of El Segundo, Development Services Department
350 Main Street
El Segundo, California 90245

RE: Pacific Coast Commons Specific Plan –
Draft Environmental Impact Report (DEIR)
SCH# 2020050508
GTS# 07-LA-2020-03504
Vic. LA-1 PM 25.455
Vic. LA-105 PM 00.474

Dear Paul Samaras,

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed Pacific Coast Commons Specific Plan (Project) includes approximately 6.3 acres (post-dedication) of developed property located along Pacific Coast Highway. The entire area would receive a new General Plan Land Use Designation and zoning of Pacific Coast Commons Specific Plan. The adoption of a Specific Plan would allow for the following:

1. The continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767square feet of hotel development;
2. 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/townhomes;
3. 11,252square feet of new commercial/retail uses; and
4. Three new parking structures that would contain approximately 792 parking stalls.

A1-1

The nearest State facilities to the proposed project are SR 1 and I-105. After reviewing the DEIR, Caltrans has the following comments:

Caltrans acknowledges and supports infill development that provides a mix of land uses which allow a neighborhood to meet their needs for housing, work, and services, like the proposed Project aims to facilitate. Caltrans applauds the inclusion of a Shared Parking Analysis (Appendix J-2) which provides additional evidence that current municipal parking requirements result in more car parking than necessary. However, Caltrans still recommends reducing the amount of car parking to the fewest number of spaces possible. Research looking at the relationship between land-use, parking, and transportation indicates that car parking prioritizes driving above all other

A1-2

"Provide a safe and reliable transportation network that serves all people and respects the environment"

travel modes and undermines a community's ability to choose public transit and active modes of transportation. If the car parking structures must be built, they should be designed in a way that is conducive to adaptive reuse. They should contain flat floors with ramps on the exterior edge so that they can be more easily converted to beneficial uses in the future.

A1-2 Cont.

The project will not be providing unbundled car parking for residential units, despite it being a specific goal in the City of El Segundo Climate Action Plan. The DEIR states that this goal isn't applicable to the project, even though mandatory bundle parking has been shown to have a direct impact on housing costs, transportation choice, and ultimately results in additional Vehicle Miles Travelled (VMT). Additionally, the exact number of secure bike parking spaces to be provided is not specified. Caltrans recommends at least one long-term bicycle parking space per residential unit. Caltrans would encourage the Lead Agency to seriously consider unbundled car parking and providing an equitable number of long-term bike parking spaces as conditions of approval for this Project.

A1-3

For any work on or adjacent to Caltrans Right-of-Way, an Encroachment Permit will be required. Please reference the following right-of-way maps when applying: P23579-1, P23579-3.

Additionally, transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

A1-4

If you have any questions, please contact project coordinator Anthony Higgins, at anthony.higgins@dot.ca.gov and refer to GTS# 07-LA-2020-03504.

Sincerely,

Miya Edmonson

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Response to Comment Letter A1

California Department of Transportation
March 26, 2021

A1-1 This comment summarizes the proposed Project's characteristics and location. The comment's summary of the Project's characteristics and location are correctly recorded with the exception of the Project site's acreage post street dedications. The comment letter recorded the approximate size as 6.3 acres. As detailed in Section 3.1, Project Summary, of the Draft EIR, the Project site totals approximately 6.385 gross acres or 6.23 acres post street dedications. No further response is required.

A1-2 This comment summarizes the Project and identifies the nearest State facilities, consistent with Draft EIR Section 4.13, Transportation. This comment also acknowledges that the Project constitutes an infill redevelopment rather than an all-new development and applauds the inclusion of the Shared Parking Analysis (included as Appendix J-2 of the Draft EIR) to reduce the parking requirements from what is currently required by the City of El Segundo. However, Caltrans still recommends reducing the number of parking spaces provided to the fewest number of spaces possible.

The Shared Parking Analysis reduced the City's parking ratios below what is required by the City's Municipal Code. Residential parking ratios were reduced from 2 spaces per dwelling unit to 1 space per studio, 1.5 spaces per 1-bedroom, and 2 spaces per 2-bedroom, which is supported by Institute of Transportation Engineers (ITE) rates per bedroom and further supported with research from Palo Alto (see Draft EIR, Appendix J-2, for a summary of this research). Hotel parking rates were also reduced based on the observed parking demands at the existing hotels, and then were adjusted to assume full occupancy of the rooms.

Caltrans also states that the proposed parking structures should be designed in a way that is conducive to adaptive reuse and should contain flat floors with ramps on the exterior edge so that they can be more easily converted to beneficial uses in the future. Taking into account site constraints, the parking structures have been designed to have flat floors to accommodate future conversions to different uses, as depicted in Figures 3-4C, Conceptual PCC-South Section, 3-5C, Conceptual PCC-Fairfield Parking Section, and 3-6C, Conceptual PCC-North Section of Chapter 3, Project Description of the Draft EIR.

A1-3 This comment states that the Project will not be providing unbundled parking for residential units, despite being a goal in the City of El Segundo Climate Action Plan. The Project Applicant has not proposed to unbundle parking in order to be responsive to community feedback received during public outreach in which concerns were expressed related to the potential for overflow parking into the adjacent residential community. Further, compliance with all goals of the City's Climate Action Plan is not mandatory to determine consistency. The Climate Action Plan is an aspirational document and does not modify what is in the City's General Plan or the El Segundo Municipal Code (ESMC). Further, vehicle parking is not a required threshold of consideration for the purposes of determining environmental impacts pursuant to CEQA.

The comment also points out that the number of bicycle parking spaces is not specified and recommends at least one long-term bicycle parking space per residential unit. This comment is acknowledged and will be taken into consideration by the City's decision makers as part of the Final

EIR. The Project will provide the following number of bicycle parking spaces, per the bicycle parking requirements established in the ESMC and CalGreen requirements:

- PCC South
  - 8 bike parking spaces for commercial uses
  - 34 bike parking spaces for residential use
- Fairfield Site
  - 6 bike parking spaces for commercial uses
- PCC North
  - 6 bike parking spaces for commercial uses
  - 24 bike parking spaces for residential use

The Project will provide more bicycle parking for both commercial and residential uses than is required by the City's Municipal Code.

Finally, Caltrans encourages the Lead Agency to consider unbundled car parking and providing an equitable number of long-term bike parking spaces as conditions of approval for this Project. This comment is acknowledged and will be shared with the City's decision makers.

A1-4 This comment states an Encroachment Permit will be required for any work on or adjacent to the Caltrans right-of-way and that a Caltrans transportation permit is required for oversized-transport vehicles utilizing State highways. These requirements are noted in the Draft EIR, within Section 3.7.3, Other Permits and Approvals. The comment also recommends large size truck trips be limited to off-peak hour commute periods. As stated in the Draft EIR, within Section 3.7.3, Other Permits and Approvals, the Project will require approval of a Traffic Control Plan in compliance with the California Manual Uniform Traffic-Control Devices. Additionally, MM-TRA-1 included in Section 4.13, Transportation, requires that the Traffic Control Plan address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or rerouting of construction trucks away from congested streets or sensitive receptors. These requirements are adequate to address potential impacts associated with use of large trucks during construction activities. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

Comment Letter O1

From: Sean Silva [redacted]
Sent: Monday, March 8, 2021 2:52 PM
To: Samaras, Paul
Subject: Public Records Request - 401 N PCH Project

Follow Up Flag: Follow up
Flag Status: Flagged

March 8, 2021

Via Email and U.S. Mail

City of El Segundo
Attn: Paul Samaras
350 Main St.
El Segundo, CA 90245
psamaras@elsegundo.org

RE: Public Records Act Request and Request for Mailed Notice of Public Hearings and Actions – Pacific Coast Commons, 401 N Pacific Coast Highway El Segundo, CA 90245

Dear Mr. Samaras,

CREED LA is writing to request a copy of any and all records related to the project, the Pacific Coast Commons, located at 401 North Pacific Coast Highway in El Segundo. The project consists of a 6-story building with 120 residential units and 5,700 square feet of commercial space and a second 6-story building with 137 apartment units and 5,500 square feet of commercial space; along with 6 detached townhomes. We are also writing to request copies of all communications and mailed notice of any and all hearings and/or actions related to the Project.

Our request for mailed notice of all hearings includes hearings, study sessions and community meetings related to the Project, certification of the MND (or recirculated DEIR), and approval of any Project entitlements. This request is made pursuant to Public Resources Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152 and Government Code Section 65092, which require local 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. Our request includes notice to any City actions, hearings or other proceedings regarding the Project, Project approvals and any actions taken, or additional documents released pursuant to the California Environmental Quality Act.

Our request for all records related to the Project is made pursuant to the California Public Records Act. (Government Code § 6250 et seq.) This request is also made pursuant to Article I, section 3(b) of the California Constitution, which provides a constitutional right of access to information concerning the conduct of government. Article I, section 3(b) provides that any statutory right to information shall be broadly construed to provide the greatest access to government information and further requires that any statute that limits the right of access to information shall be narrowly construed.

O1-1

1

We will pay for any direct costs of duplication associated with filling this request up to $200. However, please contact me at (877) 810-7473 with a cost estimate before copying/scanning the materials.

Pursuant to Government Code Section 6253.9, if the requested documents are in electronic format and are 10 MB or less (or can be easily broken into sections of 10 MB or less), please email them to me as attachments.

My contact information is:

U.S. Mail
Jeff Modrzejewski
CREED LA
501 Shatto Place, Suite 200
Los Angeles, CA. 90020

Email
creedla@creedla.com

O1-1 Cont.

Please call me if you have any questions. Thank you for your assistance with this matter.

Sincerely,
Jeff Modrzejewski
Executive Director

2

Response to Comment Letter O1

CREED LA
March 8, 2021

O1-1 This comment requests a copy of any and all records related to the proposed Project, including copies of all communications and mailed notices of any and all hearings and/or actions related to the Project. The comment's request will be granted pursuant to Public Resource Code Sections 21092.2, 21080.4, 21083.9, 21092, 21108 and 21152, and Government Code Section 65092, as cited in the letter. Below is a list of approvals required for Project implementation.

As specified in the above listing, the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, would be considered at a public hearing by the City's decision makers. As such, these potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The designated contact for CREED LA will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the Lead Agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse.

Lastly, the comment only partially summarizes the project description by not including the components of PCC-Fairfield Parking. Please see Chapter 3, Project Description of the Draft EIR for more details, including Table 3-2, Conceptual Site Plan and Specific Plan Buildout Summary, for a breakdown of the proposed units and square footage for each land use. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter O2

Ph: (626) 381-9248
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Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
Suite 104
Pasadena, California 91101

VIA ELECTRONIC & U.S. MAIL

March 22, 2021

Tracy Weaver
City Clerk
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: allcityclerks@elsegundo.org

Paul Samaras
Principal Planner
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Public Records Act and Mailing List Request Regarding Pacific Coast Commons Specific Plan (SCH #: 2020050508).

Dear Ms. Weaver and Mr. Samaras,

On behalf of Southwest Regional Council of Carpenters ("**SWRCC**") and its members, this Office requests that the City of El Segundo ("**City**") provide any and all information referring or related to the Pacific Coast Commons Specific Plan ("**Project**") pursuant to the California Public Records Act ("**PRA**"), Cal. Government ("**Gov't**") Code §§ 6250–6270 (collectively "**PRA Request**").

Moreover, the SWRCC requests that City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and 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.

O2-1

The Southwest Regional Council of Carpenters is a labor union representing 50,000 union carpenters in six states, including in southern California, and has a strong interest in well-ordered land use planning and addressing the environmental impacts of development projects, such as the Project.

I. PUBLIC RECORDS ACT REQUEST.

SWRCC is requesting any and all information referring or related to the Project.

The Public Records Act defines the term "public record" broadly as "any writing containing information relating to the conduct of the public's business . . . regardless of physical form and characteristics." Gov't Code § 6252(d). "Records" includes all communications relating to public business regardless of physical form or characteristics, including but not limited to any writing, picture, sound, or symbol, whether paper, magnetic, electronic, text, other media, or written verification of any oral communication. Included in this request are any references in any appointment calendars and applications, phone records, or text records. These "records" are to include, but are not limited to correspondences, e-mails, reports, letters, memorandums, and communications by any employee or elected official of City concerning the Project.

O2-1 Cont.

Please include in your response to this request the following examples of "records," as well as any similar physical or electronic forms of communication: any form of writing such as correspondence, electronic mail records ("email"), legal and factual memoranda, facsimiles, photographs, maps, videotapes, film, data, reports, notes, audiotapes, or drawings. Cal. Government Code § 6252(g) (defining a writing to including "any record thereby created, regardless of the manner in which the record has been stored"). Responsive correspondence should include, inter alia, emails, text messages, or any other form of communication regardless of whether they were sent or received on public or privately-owned electronic devices "relating to the conduct of the public's business." Cal. Government Code § 6252(e); *Citizens for Ceres v. Super. Ct.* ("*Ceres*") (2013) 217 Cal. App. 4th 889, 909; *Citizens for Open Gov't v. City of Lodi ("Lodi")* (2012) 205 Cal.App.4th 296, 307, 311; *City of San Jose v. Superior Court* (2017) 2 Cal. 5th 608, 625 (finding that a public employee or officer's "writings about public business are not excluded" from the California Public Records Act "simply because they have been sent, received, or stored in a personal account.") .

This Office requests any and all information referring or related to the Project, including but not limited to:

(1) All Project application materials;

(2) All staff reports and related documents prepared by the City with respect to its compliance with the substantive and procedural requirements of the California Environmental Quality Act, Public Resources Code § 21000 et seq., and the CEQA Guidelines, title 14, California Code of Regulations, § 15000 et seq. (collectively "**CEQA**") and with respect to the action on the Project;

(3) All staff reports and related documents prepared by the City and written testimony or documents submitted by any person relevant to any findings or statement of overriding considerations adopted by the agency pursuant to CEQA;

(4) Any transcript or minutes of the proceedings at which the decisionmaking body of the City heard testimony on, or considered any environmental document on, the Project, and any transcript or minutes of proceedings before any advisory body to the public agency that were presented to the decisionmaking body prior to action on the environmental documents or on the Project;

(5) All notices issued by the City to comply with CEQA or with any other law governing the processing and approval of the Project;

(6) All written comments received in response to, or in connection with, environmental documents prepared for the Project, including responses to the notice of preparation;

(7) All written evidence or correspondence submitted to, or transferred from, the City with respect to compliance with CEQA or with respect to the Project;

(8) Any proposed decisions or findings submitted to the decisionmaking body of the City by its staff, or the Project proponent, Project opponents, or other persons;

O2-1 Cont.

(9) The documentation of the final City decision and approvals, including the final environmental impact report, mitigated negative declaration, negative declaration, or notice of exemption, and all documents, in addition to those referenced in paragraph (3), cited or relied on in the findings or in a statement of overriding considerations adopted pursuant to CEQA;

(10) Any other written materials relevant to the public agency's compliance with CEQA or to its decision on the merits of the Project, including the initial study, any drafts of any environmental document, or portions thereof, that have been released for public review, and copies of studies or other documents relied upon in any environmental document prepared for the Project and either made available to the public during the public review period or included in the City 's files on the Project, and all internal agency communications, including staff notes and memoranda related to the Project or to compliance with CEQA; and

(11) The full written record before any inferior administrative decisionmaking body whose decision was appealed to a superior administrative decisionmaking body prior to the filing of any litigation.

O2-1 Cont.

Please respond within 10 days from the date you receive this request as to whether this request specifies identifiable records not exempt from disclosure under the PRA or otherwise privileged or confidential, and are therefore subject to disclosure. This Office understands that this time may be extended up to 14 days for unusual circumstances as provided by Cal. Government Code § 6253(c), and that we will be notified of any extension and the reasons justifying it.

We request that you provide all documents in electronic format and waive any and all fees associated with this Request. SWRCC is a community-based organization. Please notify and obtain express approval from this Office before incurring any duplication costs.

If any of the above requested documents are available online, please provide us with the URL web address at which the documents may be downloaded. If any of the requested documents are retained by the City in electronic computer-readable format such as PDF (portable document format), please provide us with pdf copies of the

documents via email, or inform us of the location at which we can copy these documents electronically.

In preparing your response, please bear in mind that you have an obligation under Government Code section 6253.1 to (1) identify all records and information responsive to our request or the purpose of our request; (2) describe the information technology and physical location in which the records exist; and (3) provide suggestions for overcoming any practical basis for denying access to the records or information sought.

In responding to this request, please bear in mind that any exemptions from disclosure you may believe to be applicable are to be narrowly construed. *Marken v. Santa Monica-Malibu Unif. Sch. Dist.* (2012) 202 Cal. App. 4th 1250,1262; and may be further narrowed or eliminated by the adoption of Proposition 59, which amended article I, section 3(b)(2) of the California Constitution to direct that any "statute ... or other authority ... [that] limits the right of access" to "information concerning the conduct of the people's business" must be "narrowly construed."

As for any records that you nonetheless decline to produce on the grounds of an exemption, please bear in mind that the case law under the Public Records Act imposes a duty on you to distinguish between the exempt and the non-exempt portion of any such records, and to attempt in good faith to redact the exempt portion and to disclose the balance of such documents.

Please bear in mind further that should you choose to withhold any document from disclosure, you have a duty under Government Code section 6255, subd. (a) to "justify withholding any record by demonstrating that the record in question is exempt under express provisions" of the Public Records Act or that "the public interest served by not disclosing the record clearly outweighs the public interest served by disclosure of the record."

Finally, please note that you must retain and not destroy any and all records, notwithstanding any local record retention or document destruction policies. As the Court noted in *Golden Door Properties, LLC v. Superior Court of San Diego County* (2020) 53 Cal.App.5th 733 that a public agency "must retain '[a]ll written evidence or correspondence submitted to, or transferred from' . . . with respect to" CEQA compliance or "with respect to the project."

O2-1 Cont.

II. NOTICE LIST REQUEST.

We also ask that you put this Office on its notice list for any and all notices issued under the CEQA and the Planning and Zoning Law.

In particular, we request that City send by mail or electronic mail notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the City and any of its subdivision for the Project, or supported, in whole or in part, through permits, contracts, grants, subsidies, loans, or other forms of approvals, actions or assistance, including but not limited to the following:

- Notices of any public hearing held in connection with the Project; as well as
- Any and all notices prepared pursuant to CEQA, including but not limited to:
- Notices of determination that an Environmental Impact Report ("EIR") or supplemental EIR is required for a project, prepared pursuant to Public Resources Code Section 21080.4;
- Notices of availability of an EIR or a negative declaration for a project prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations;
- Notices of approval or determination to carry out a project, prepared pursuant to Public Resources Code Section 21152 or any other provision of law;
- Notice of approval or certification of any EIR or negative declaration prepared pursuant to Public Resources Code Section 21152 or any other provision of law;
- Notice of exemption from CEQA prepared pursuant to Public Resources Code section 21152 or any other provision of law; and
- Notice of any Final EIR prepared pursuant to CEQA.

This Office is requesting notices of any approvals or public hearings under CEQA and the California Planning and Zoning Law. This request is filed pursuant to California

O2-1 Cont.

Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section 65092 requiring 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.

Please send notice by regular and electronic mail to:

Mitchell M. Tsai, Attorney At Law
155 South El Molino Avenue
Suite 104
Pasadena, California 91101
Em: mitch@mitchtsailaw.com
Em: greg@mitchtsailaw.com
Em: leon@mitchtsailaw.com

O2-1
Cont.

We look forward to working with you. If you have any questions or concerns, please do not hesitate to contact our Office.

Sincerely,

Mitchell M. Tsai
Attorneys for Southwest Regional Council
of Carpenters

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Response to Comment Letter O2

Southwest Regional Council of Carpenters
March 22, 2021

O2-1 This comment requests a copy of any and all information related to the proposed Project, including any and all notices of any and all hearings and/or actions related to the Project. The comment's request will be granted pursuant to the California Public Records Act (Government Code §§6250-6270); California Environmental Quality Act (CEQA) (Public Resource Code §21000 et seq); and Planning and Zoning Law (Government Code §§65000-65010), as cited in the letter.

As specified in Section 3.7 of the Draft EIR, the Project applicant has requested approvals including the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, which would be considered at a public hearing by the City's decision makers. These potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The designated contacts for the Southwest Regional Council of Carpenters will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the Lead Agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse. Lastly, the comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter O3

LOZEAU DRURY LLP
T. 510.836.4200
F. 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
rebecca@lozeaudrury.com

Via Email

April 12, 2021

Paul Samaras, AICP
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245
psamaras@elsegundo.org.

Re: Comment on Draft Environmental Impact Report, Pacific Coast Commons Specific Plan (SCH# 2020050508)

Dear Mr. Samaras:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Project known as Pacific Coast Commons Specific Plan, aka SCH# 2020050508, including all actions related or referring to the proposed demolition of existing surface parking lots and construction of a new mixed use development located at 401-575 N. Pacific Coast Highway (PCH) and the parking lot on 600-block of PCH in the City of El Segundo ("Project").

After reviewing the DEIR, we conclude that the DEIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Development Services Department address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project. We reserve the right to supplement these comments during review of the Final EIR for the Project and at public hearings concerning the Project. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

O3-1

Sincerely,

Rebecca Davis

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Response to Comment Letter 03

Supporters Alliance for Environmental Responsibility (SAFER)
April 12, 2021

03-1 This commenter's assertion that the Draft EIR "fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's impacts" is inaccurate. This statement does not identify any deficiencies of the document and does not support this general assertion with any evidence.

The Draft EIR has been prepared in conformance with the substantive and procedural requirements of CEQA and the CEQA Guidelines. Specifically, the Draft EIR includes all of the required contents of an EIR and the associated required details and topics for analysis, as set forth in Sections 15120 through 15132 of the CEQA Guidelines. Furthermore, the Draft EIR was prepared by experts in the disciples of environmental impact assessment. For example, the topic of noise was evaluated by an Institute of Noise Control Engineering certified professional; the topic of archaeological resources was evaluated by a Registered Professional Archaeologist; the topic of historic resources was evaluated by professionals with master's degrees in the field; the topic of hazards and hazardous materials was evaluated by a professional engineer; and the topic of transportation was evaluated by an American Institute of Certified Planners professional. All conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

The Draft EIR presents a comprehensive analysis of the Project's potential environmental impacts and feasible mitigation measures and contains approximately 700 pages of detailed analysis, as well as a shorter executive summary that explains the analysis and conclusions in clean and simple language (as required by Section 15123 of the CEQA Guidelines). The Draft EIR is also consistent with Section 15121 of the CEQA Guidelines, in that it constitutes an informational document that informs public agency decision makers and the public generally of the significant environmental effect of a project, identifies possible ways to minimize the significant effects, and describes reasonable alternatives to the project. While the Draft EIR identifies a number of significant environmental effects, based on substantial evidence in the record, it also identifies feasible mitigation measures that would reduce all of the identified significant impacts to below a level of significance. One exception is a significant impact related to the Project's consistency with the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[2] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details. This conclusion and the infeasibility of mitigation for this impact is described and substantiated in Section 4.2.7 of the Draft EIR. For these reasons, the Draft EIR is considered adequate under CEQA, the Draft EIR meets the purpose and intent of CEQA, and the Draft EIR has imposed all feasible measures to mitigate the Project's significant impacts.

The commenter's assertion that the Draft EIR must be revised and recirculated is inaccurate. CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, describes the thresholds for recirculation of an EIR. Pursuant to Section 15088.5, a lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of

[2] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

the draft EIR but before certification. New information can include a disclosure showing that a new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented, a substantial increase in the severity of an environmental impact, 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), or the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Significant new information, as it is defined in CEQA Guidelines Section 15088.5, has not been added to this EIR subsequent to its release for public review. No changes have been made to the Project, and no changes have occurred in the environmental setting such that a new significant impact would occur or such that a substantial increase in the severity of an impact would occur. No additional data or other information has been added such that a new significant impact would occur or such that a substantial increase in the severity of an impact would occur. Additionally, no feasible project alternatives or mitigation measures considerably different from those in the Draft EIR that would clearly lessen the environmental impacts of the Project have been identified. Lastly, the Draft EIR is not fundamentally and basically inadequate and conclusory in nature. As described above, the Draft EIR includes extensive environmental analysis that was conducted by qualified professionals. The Draft EIR discloses a number of significant impacts that would result from the proposed Project and identifies mitigation that would reduce these significant impacts below a level of significance. As such, the Draft EIR is not required to be revised and recirculated, and the commenter has not presented substantial evidence to support a need for recirculation.

Section 15204 of the CEQA Guidelines states that "Reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments." This comment states that the Draft EIR "fails as an informational document" and that it "fails to impose all feasible mitigation measures." However, no explanation, examples, or evidence is provided in support of these statements. As further provided in Section 15204, "When responding to comments, lead agencies need only respond to significant environmental issues…" This comment does not provide evidence, or reference to, any significant environmental issues associated with the Project, and the claims set forth in this comment are not supported by any substantial evidence. (Substantial evidence must include "facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts" (CEQA Guidelines Section 15384)).

Comment Letter O4

April 8, 2021

Sam Dunlap
Cultural Resource Director
Gabrielino Tongva Nation
P.O. Box 86908
Los Angeles, California 90086

Attention:
Paul Samaras, AICP
Principal Planner
City of El Segundo

Subject:
Pacific Coast Commons Specific Plan (State Clearinghouse No. 2020050508)

Dear Mr. Samaras,

The Gabrielino Tongva Nation requests AB52 consultation on the proposed Pacific Coastal Commons Project in the city of El Segundo. Since the project location is within the traditional tribal territory of the Gabrielino Tongva Nation, our tribe's concerns will focus on any potential impacts to tribal cultural resources. We will also like to ensure that appropriate mitigation measures will be implemented for this project. O4-1

I look forward to discussing these issues with you at your earliest convenience.

Sincerely,

Sam Dunlap
Cultural Resource Director
(909) 262-9351
Samdunlap@earthlink.net

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Response to Comment Letter O4

Gabrielino Tongva Nation
April 8, 2021

O4-1 This comment states that the Gabrielino Tongva Nation (Tribe) requests Assembly Bill (AB) 52 consultation on the proposed Project. As described in Section 4.14, starting on page 4.14-7, the City contacted the Tribe in formal AB 52 notification on May 18, 2020. The Tribe did not respond within the 30-day window requesting consultation. Additionally, the Gabrieleno Band of Mission Indians – Kizh Nation sent a letter to the City on May 29, 2020 requesting consultation. Records of the AB 52 Consultation are included as Appendix K of the Draft EIR but are confidential and not for public view.

As discussed in Section 4.3, Cultural Resources, of the Draft EIR, MM-CUL-2 address potential impacts to archaeological resources (i.e., sites, features, or artifacts) and in Section 4.14, Tribal Cultural Resources, of the Draft EIR, MM-TCR-1 addresses potential impacts to tribal cultural resources. MM-CUL-2 and MM-TCR-1 are adequate to address all potential impacts to such resources, and no additional mitigation is required. However, while the window provided for consultation under AB 52 is concluded, the City will provide the results of the archaeological study to the Tribe and would review any additional information that the Tribe would like to provide with regards to tribal cultural resources or cultural resources that may be affected by the proposed Project.

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Comment Letter I1

From: BYDS Chow [redacted]
Sent: Saturday, February 27, 2021 2:39 PM
To: planning
Subject: Pacific Coast Commons -Objection

I1-1

Hi

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Response to Comment Letter I1

Byds Chow
February 27, 2021

I1-1 This comment provides an objection to the proposed Project, as stated in the subject line of the email. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration as part of this Final EIR. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required.

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Comment Letter I2

From: wendy@martinlandscaping [redacted]
Sent: Sunday, February 28, 2021 6:48 AM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

February 28, 2021

Paul Samarus

RE: Pacific Coast Commons, El Segundo CA ,90245

Please keep me appraised of any developments, meetings, decisions etc. that become available regarding this proposed project as it develops. I2-1

Thank You

Wendy Martin

wendy052581@aolo.com

wendy@martonlandscapong.nmet

Wendy Martin / CFO
wendy@martinlandscaping.net
Office: 310-930-7892
www.MartinLandscaping.net
Lic. 932172

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Response to Comment Letter I2

Wendy Martin
February 28, 2021

I2-1 This comment requests to be notified of future information related to the proposed Project, including developments, meetings and decisions. As specified in Section 3.7 of the Draft EIR, the Project applicant has requested approvals including the certification of the Final EIR and the adoption of the Pacific Coast Commons Specific Plan, for example, which would be considered at a public hearing by the City's decision makers. These potential future approvals would be notified to the public in compliance with State and local regulations including the Ralph M. Brown Act (Government Code Section 54950, et seq.). The commenter's email address will be included in all future notices of actions or hearings related to the proposed Project. Furthermore, in accordance with CEQA Guidelines Section 15094, the lead agency shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse.

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Comment Letter I3

From: Paul Morrison [redacted]
Sent: Monday, March 1, 2021 12:01 PM
To: Samaras, Paul
Subject: MAR CDC Holly, LLC

Morning Mr. Samaras

My name is Paul Morrison, I live at 421 Indiana Street, Apt 4. I am a Survey Party Chief with the City of Los Angeles, currently telecommuting.

I met the project engineers for this project late last year. They informed me that the work would start in 2 years, sometime in 2022 I would think. The water main is currently being replaced, which I assume is part of this project. I am 67 years old and will retire from the City of Los Angeles May 8th of this year.

I will be submitting a written comment regarding the environmental effects of this project before the deadline. This email has nothing to do with that pending comment.

This project will have definite quality of life consequences for me. As a construction Survey Party Chief I have some idea of the scope of the project. Will construction start as I was told, sometime in 2022? Will this project take 2 years to complete? Your response will help me make decisions that I need to think about.

I would greatly appreciate your feedback on these questions.

I3-1

Paul Morrison
Survey Division | Survey Party Chief
T: (213) 923-4694 | F: (310) 575-8864
1828 Sawtelle Blvd., Ste. 105
Los Angeles, CA. 90025

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Response to Comment Letter I3

Paul Morrison
March 1, 2021

I3-1 This comment includes a question related to the proposed Project's construction schedule. Section 3.4, Project Construction, of the Draft EIR includes a description of the construction schedule for the proposed Project. It is important to note that the actual timing of construction depends on various factors that are unknown at the time of the preparation of the Draft EIR; therefore, conservative assumptions were included in the Draft EIR to ensure an adequate analysis of potential impacts. As stated in the Draft EIR, it is anticipated that the three new development areas (i.e., PCC-South, PCC-Fairfield Parking, PCC-North) will be constructed sequentially in separate phases, and if so, are anticipated to be completed within 4 1/2 years of EIR certification and Project approval. However, the Draft EIR assumes an overlap of construction phases, which is possible depending on market conditions and would provide a more conservative analysis of short-term air quality, greenhouse gas, noise, and transportation impacts.

Section 3, Project Description of the Draft EIR describes that construction would begin as early as October 2021 (beginning of Phase 1) and end in July 2024 (end of overlapping Phase 2 and 3).[3] As shown in Table 3-3, Estimated Construction Schedule, the Draft EIR identifies site preparation and demolition as well as grading and evacuation would occur in Quarter 4 (Q4) of 2021. Additionally, building construction has been estimated to commence in Q1 of 2022.

Additionally, the comment notes an existing water main is being replaced. The commenter assumes the upgrade is part of the proposed Project. Although the comment is not specific in the particular water line under construction location, Section 4.15, Utilities and Service Systems, of the Draft EIR describes the existing and proposed water facilities supporting the Project site. Figure 4.15-1, Conceptual Water Utility Plan, of the Draft EIR provides the locations of the existing water lines and identifies the estimated domestic water demand for each of the proposed development areas within the Specific Plan, including PCC-South, PCC-Fairfield Parking, and PCC-North. Any required water line upgrades or improvements that would be a direct result of the proposed Project are not yet under construction and would not proceed unless the proposed Project is approved.

Lastly, the comment states an additional comment letter will be submitted by the commenter which will identify impacts to quality of life for the commenter. The aforementioned comment letter has been received and responded to; please see under Response to Comment Letter I26, below.

[3] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

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Comment Letter I4

From: Susannah Harper [redacted]
Sent: Tuesday, March 2, 2021 11:37 AM
To: Samaras, Paul
Subject: Keep small town feel of El Segundo

As a homeowner In El Segundo, the draw is the small town feel. Please reject the proposal for Pacific Coast Commons apartment complexes. I4-1

Sent from my IPhone

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Response to Comment Letter I4

Susannah Harper
March 2, 2021

I4-1 This comment expresses opposition to the proposed Project. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I5

From: Laura Honsowetz [redacted]
Sent: Wednesday, March 3, 2021 12:33 PM
To: Samaras, Paul
Subject: PCC high density apartment proposals

Hi Mr. Samaras,

I have been a resident of El Segundo for over 30 years and I have to say I have never written to the city about any building proposals thus far. I received a flyer on my door step the other day explaining the Pacific Coast Commons plan to build 2 multi-story apartment units. I was quite surprised and angered that this would even be considered. I hope the city is not so greedy as to proceed solely for the tax revenues this would generate. I5-1

This is a small town and we already recently added a huge number of new dwellings on the old Imperial School site just a short time ago. This added a large number of residents in a short amount of time that has impacted traffic, noise, school capacity, etc. We cannot continue to overdevelop our small little town. I live on the East side of town and we already have to content with hotel patrons and people parking in our neighborhoods to avoid airport parking fees (although this is down due to Covid now but I'm sure will resume eventually). We do not need more apartments on this side of town taking up residential parking spaces. I5-2

As it is, you can barely find parking in the Ralphs parking lot on any normal day. I can't imagine adding hundreds more people to this area and expecting it not to get worse. I love this small town and it's charm. This is one of the qualities that brings people here. I am not opposed to making our city better, but this is not it. We can improve upon existing buildings, but we do not need to add any new apartment buildings. I5-3

I know many people feel this way, but unfortunately there are many people that will not take the time to write.

Please do not approve this company's plan. We do not need it or want it.

Best regards,
Laura Honsowetz

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Response to Comment Letter I5

Laura Honsowetz
March 3, 2021

I5-1 This comment expresses opposition to the proposed Project. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No changes or additions to the project description or analyses included in the Draft EIR are required. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

I5-2 The comment cites a recent project located at the former Imperial School site, which the commenter states resulted in a large number of new housing units and impacts to schools' capacity, and also states a general concern more traffic, noise, and overflow parking from the airport and hotels. Table 2-3, List of Cumulative Projects, of the Draft EIR identifies all anticipated cumulative projects at the time of the issuance of the Notice of Preparation, as well as the aforementioned site as #9 on the cumulative projects list, which comprises of 58 residential units within the City limits. The proposed Project's cumulatively considerable impacts were analyzed within each section of Chapter 4, Environmental Analysis, of the Draft EIR. As presented, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[4] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.

As such, the effects of the proposed Project on the environment (combined with other past, present, and reasonably foreseeable future development in the City) are analyzed and disclosed in the Draft EIR, and mitigation measures have been provided to reduce impacts to the extent feasible. Nevertheless, the commenter's general opposition to the proposed Project and further growth in the City will be included in this Final EIR for review and consideration by decision makers.

I5-3 This comment notes existing parking conditions on residential streets and is concerned for the Project's impacts to parking. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR.

[4] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Comment Letter I6

From: Jed Montgomery [redacted]
Sent: Friday, March 12, 2021 2:40 PM
To: Samaras, Paul
Subject: Pacific Coast Commons Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mr. Samaras,

I live near the proposal site. I was wondering if this is adopted what the city is doing, thinking of doing, or requiring developer to do in order to mitigate any potential negative impacts? I6-1

1. Issue parking permits for all surrounding streets that **excludes** any Hotel, Restaurant, Retail and PCC resident? I6-2
2. Speed bumps along Washington St between Mariposa and Maple to deter short cutters when traffic backs up at Mariposa/PCH or just close off Washington Street access from Mariposa altogether ? I6-3
3. Plant dense tall hedge on west side of parks to dampen propagation of noise pollution ?
4. Fund a Residential Sound Insulation program for homes with largest noise impact? Dual double pane windows
5. Require developer to buy noise easements? I6-4
6. Change adjacent Park hours to mitigate potential of unwanted activity and/or noise? Currently, I believe they are technically all 24 hrs / day

Sincerely,
Jed Montgomery

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Response to Comment Letter I6

Jed Montgomery
March 12, 2021

I6-1 This comment asks whether the proposed Project has been adopted and what the City is doing in order to mitigate the Project's impacts.

The proposed Project will be considered for approval by City decision makers at a public hearing for the Project. Decision makers will also consider this EIR for certification. The Draft EIR for the Project has identified a number of potentially significant environmental impacts under CEQA that would be associated with the proposed Project. (A list of these impacts can be found Table ES-1 in the Executive Summary of the Draft EIR.) Mitigation measures have been set forth in the Draft EIR for all of the potentially significant impacts (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[5] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). As part of the Project approval process, City decision makers will be required to adopt a mitigation monitoring plan (if the Project is approved), which is required to be in place and effective throughout all phases of the Project and would ensure that the identified mitigation measures are implemented. Mitigation measures that have been set forth for the Project include the use of efficient, low-emission construction equipment; measures to protect inadvertent discoveries of archaeological, paleontological, and/or tribal cultural resources during construction excavation; measures to ensure proper handling and disposal of hazardous materials that are encountered during construction; measures to reduce construction noise; and, measures to promote traffic safety during construction. These measures are also listed in Table ES-1 1 in the Executive Summary of the Draft EIR, as well as Sections 4.2 (Air Quality), 4.3 (Cultural Resources), 4.5 (Geology and Soils), 4.7 (Hazards and Hazardous Materials), 4.10 (Noise), 4.13 (Transportation), 4.14 (Tribal Cultural Resources).

I6-2 This comment provides a recommendation for the City to issue parking permits for all surrounding streets that would exclude any hotel, restaurant, retail, and Pacific Coast Commons residents.

The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. Nevertheless, the suggestion to provide parking permits for surrounding streets that excludes any hotel, restaurant, retail, and Pacific Coast Commons residents will be provided to City decision makers for their review and consideration as part of this Final EIR.

While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). As mentioned in the parking evaluation (Shared Parking Analysis, Fehr & Peers, February 2021), residential parking is not anticipated to be

[5] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan.

unbundled (i.e., the residents would not be charged a separate parking fee from their base rental rate). Furthermore, as described in Appendix J-2 of the Draft EIR, a before and after study could be conducted on the adjacent residential streets to understand if the Project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street. The Project applicant would work with residents to suggest the boundaries of this potential permit parking district. A permit parking district is implemented by the City at the request and approval of the residents. The proposed Project would not prohibit the formation of permit parking, but it is not required for the proposed Project.

I6-3 This comment provides a recommendation for the City to install speed bumps along Washington Street (between Mariposa Avenue and Maple Avenue) or to close off Washington Street access from Mariposa Avenue to prevent short cuts.

The topic of transportation is evaluated and discussed in Section 4.13, Transportation of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation under CEQA. Furthermore, it is noted that the Transportation Impact Analysis in the Draft EIR (Appendix J-1) provides details on distribution of traffic from the proposed Project. Approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Washington Street and California Street. As such, a very low percentage of Project-related traffic is expected to use local streets such as Washington Street. Nevertheless, the commenter's suggestion to add speed bumps along Washington Street between Mariposa Avenue and Maple Avenue or to close off Washington Street access from Mariposa Avenue will be provided to City decision makers for their review and consideration as part of this Final EIR.

I6-4 This comment provides a number of recommendations pertaining noise reduction, including a sound insulation program, double-pane windows, noise easements, and changing adjacent park hours.

The topic of noise is evaluated and discussed in Section 4.10, Noise of the Draft EIR. The analysis therein determined that construction noise from the proposed Project would be potentially significant; however, mitigation measure MM-NOI-1 would reduce this impact to below a level of significance, as described and substantiated in Section 4.10. Operational noise impacts caused by the Project were determined to be below a level of significance. As such, mitigation for long-term operations of the Project is not required under CEQA. Nevertheless, the commenter's suggestions with regard to noise will be provided to City decision makers for their review and consideration as part of this Final EIR.

Comment Letter I7

From: Richard Leos [redacted]
Sent: Friday, March 19, 2021 12:30 PM
To: Samaras, Paul; Planning
Subject: Questions and Comments on Pacific Coast Commons Development Proposal

Hello Mr Samaras:

Questions-

- Will all this increased housing and affordable housing possibly devalue current nearby/impacted properties? Some owner's retirement hinges on their property value. I7-1
- If it even is remotely so, what is being thought of to mitigate or abate losses for current owners? How is the balance of El Segundo sharing the cost? I7-1
- Can we utilize areas east of Sepulveda and south of Grand? (Rezone if necessary and this seems like a good alternative, it still gives great access to transit and jobs) I7-2
- How will this impact the quality of life for current nearby/impacted residents? I7-3
- Why is such extreme high density needed? We have tons of For Rent available in El Segundo. With **COVID, people can telecommute** and don't need to be close to work. This is the new trend as numerous companies have adopted it and the airline industry as a whole has said they expect a 30% drop in business travel that WILL NOT comeback because of **telecommuting**. I7-4
- Lionel Uhry indicated that parking will be charged. Will this be mandatory or optional for resident? And is this a lifetime guarantee from all current and future owners of the property? Is this a lifetime guarantee from the City of El Segundo and future City government officials? I7-5

Comments-

- Especially impacted are those in close proximity to these developments and recent buyers I7-6
- Worried about increased congestion, noise, traffic....basically lowered quality of life I7-6
- I have noticed that rent prices have dropped recently and for example Imperial Blvd, every single building has a "For Rent" sign in the yard, market forces at work, why mess with it...?? I7-7

Employment Proximity-

- I referred to access to jobs in the "question" portion above, but are you aware that the **overwhelming majority of employees at LAX (largest employer in the area) already live within 5-10 miles of their job?** This information was uncovered as a result of the CEQA process when LAWA was proposing the LAMP (Landside Access Modernization Program). I7-8
- Purpose of SCAG RHNA is to put people close to jobs, LAX employs around 50,000 (largest employer by far in area) I7-8
  - No jobs available at LAX now or near future I7-8
  - After 9/11 it took aviation 10 years to recover after this 1 day event, the pandemic will go on for over a 1 YEAR event, therefore no huge job needs in aviation I7-8
  - Also, when jobs needed at LAX, they will be filled by those furloughed or layed off. Currently those ppl are waiting it out on significantly higher EDD / Fed stimulus and will return (translation: all the "new" jobs at LAX already spoken for) I7-8
- I'm certainly not applying this to all, but historically people who live in apartments are less desirable neighbors and more likely to engage in crime or other anti-social behavior, whereas homeowner's (condos, etc) are engaged, accountable and incentivized for a greater quality of life over longer term which produces better I7-9

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outcomes for all. Unlike those who immediately think you're discriminating, that is definitely not the case. I don't care what demographic were to live there, they could be the most diverse affluent group in Los Angeles, it's just a fact with apartments. Who is looking out for the single family neighborhood? With my property taxes, mortgage interest (even currently refi'ed) and home mtc this total is nearly $10,000 **MORE** than what annual rent would cost me and I have a simple 2/1, 1,000 sq ft fixer upper. I'm almost better off renting if my property gets devalued. Why am I paying all of these super high taxes and get nothing for it?

I7-9 Cont.

- **Bottom line is this project has a high potential to negatively impact the nearby community's quality of life, property value and feels like an attack on the single family neighborhood. Telecommuting has been adopted, mass transit and walking has not. City of El Segundo has same complaints/concerns towards LAX as recently seen in the City's response to an LAX DEIR.**

I7-10

Regards,

Richard Leos

2

Response to Comment Letter I7

Richard Leos
March 19, 2021

I7-1 This comment asks if the Project's proposed housing component would impact nearby residences' property values. According to the State CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." The Project's impact on the site's surrounding property values is not within the scope of required environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-2 This comment asks if the City could rezone and utilize areas east of Sepulveda Boulevard/Pacific Coast Highway and south of Grand Avenue as a Project site alternative. The potential for an alternative location for the proposed Project was considered within Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process. Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the proposed Project. As stated in CEQA Guidelines Section 15126.6(f)(2)(A), the Draft EIR shall analyze alternative sites based on whether or not any of the Project's significant effects would be avoided or substantially lessened by putting that Project in another location. However, there are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation. Furthermore, only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR, and no other sites along Pacific Coast Highway or east of Pacific Coast Highway and South of Grand Avenue are under control by the Project applicant. As such, alternate locations east of Sepulveda Boulevard/Pacific Coast Highway and south of Grand Avenue were rejected as being infeasible.

I7-3 This comment questions the proposed Project's impacts to quality of life for current and nearby residents surrounding the Project site. While "quality of life" is not a topic that is addressed under CEQA, environmental effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[6] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.

I7-4 This comment questions the need for developing a high-density development in the City. The commenter is concerned that rental units are already available in the City and due to COVID-19, more

[6] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

people would prefer telecommuting and hence not need to live close to work. The commenter asks if the parking charge would be mandatory and would apply to all current and future property owners.

As described in Section 3.5, Project Objectives of the Draft EIR, the following objectives are set forth in support of the proposed Project's residential units: (1) Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan; and (2) Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees. These stated objectives, as well as the proposed Specific Plan, were determined to be consistent with the goals and policies of the City's General Plan, as described in Section 4.9, Land Use and Planning (see Table 4.9-1). Implementation of the proposed Project would not negatively impact any initiatives or public policies intended to increase telecommuting options. Furthermore, any potential long-term increases in the rate of telecommuting due to COVID are unknown at this time and any potential for a corresponding reduction in the need for housing in El Segundo is speculative.

As shown in the Section 4.13 of the EIR, the proposed Project is located in an efficient traffic analysis zone (TAZ) within the City, as measured using the new metric of transportation impact analysis under CEQA, i.e., Vehicle Miles Traveled (VMT). Therefore, the development of a high-density mixed-use project in the City would further improve availability of housing and jobs in a travel-efficient location served by bus routes and the Los Angeles County Metropolitan Transportation Authority (Metro) C Line. The proposed Project would contribute to the housing supply inventory as required by the SCAG's Regional Housing Needs Assessment (RHNA). However, it is the decision of the City's elected officials to approve or deny the proposed Project. CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits.

I7-5 For a response to concerns regarding parking at the Project site, see Section 4.13, Transportation, of the Draft EIR. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Specifically, the comment raises concerns regarding paid parking at the Project site. As described in Appendix J-2, the hotels will continue to charge for parking on site and the retail uses will provide free parking with validation. Furthermore, the Project will be including the cost of parking within the residential rents and will not charge residents separately for parking.

I7-6 This comment raises concern for the residents surrounding the Project site and notes impacts related to noise and traffic would reduce quality of life. This comment is similar to the question above in Response to Comment I7-3, above. As such, please see the above response.

I7-7 This comment notes existing "For Rent" signs on properties along Imperial Boulevard. This comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-8 This comment generally asserts that the majority of employees at the Los Angeles International Airport (LAX) live near their jobs and that the demand for new employees in El Segundo will be reduced due to various factors, including the federal stimulus and the COVID-19 pandemic. Additionally, this comment's assertion is speculative and not supported by evidence. This comment does not pertain to

the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I7-9 This comment expresses opposition to the proposed Project's housing component. The comment further states socio-economic concerns that are not within the scope of the environmental analysis required by CEQA. As such, no response is required.

I7-10 This comment summarizes the aforementioned points of opposition to the proposed Project, as responded to in I7-1 through I7-9. No further response is required.

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Comment Letter I8

From: Chris Johnson [redacted]
Sent: Saturday, March 20, 2021 4:05 PM
To: Planning
Cc: Samaras, Paul
Subject: Pacific Coast Commons proposal

Hi there.

I live in El Segundo, and have three kids in our schools. I was recently made aware of the Pacific Coast Commons development. Fortunately, a concerned citizen put a lot of time into analyzing the proposal and raised some very valid points calling for revision to the current plans. Please see his summary here: https://pacificcommonsno.wixsite.com/report I8-1

The last thing we need in El Segundo is an increase in auto congestion, and vehicles zooming up and down our to-become-more-crowded streets along which our kids play and ride their bikes. Please consider this a request to review the above website, and to it into consideration prior to April 11th. I8-2

Thank you.
-Chris Johnson

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Response to Comment Letter I8

Chris Johnson
March 20, 2021

I8-1 This comment expresses concern for the proposed Project and cites a website prepared in opposition to the Project. The website provides the same links and letters as those presented in Response to Comment Letter I21, included in this Final EIR. As such, please see Response to Comment Letter I21. No further response is required.

I8-2 This comment states the proposed Project would result in an increase in traffic congestion, including increased speed of vehicles on surrounding streets thereby threatening the safety of neighborhood children. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation. Furthermore, the Transportation Impact Analysis (included as Appendix J of the Draft EIR) provides details on distribution of traffic from the proposed Project. Approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Washington Street and California Street. As such, a minor amount of Project-related traffic is expected to use local streets such as Washington Street, which have capacity to accommodate the increase and would not result in new or increased hazards to pedestrian or bicyclists. No revisions to the Draft EIR are required.

The comment further asks for this comment to be reviewed and considered prior to April 11th. The Final EIR includes a copy of each comment letter provided during the 45-day public review period from February 25, 2021 to April 12, 2021. As such, the City has prepared responses to each comment for the City's review and consideration as part of this Final EIR. Under the CEQA Guidelines, the Lead Agency is required to evaluate and provide written responses to comments received on the Draft EIR (CEQA Guidelines, Section 15088). Therefore, this comment will be provided to City decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I9

From: Jed Montgomery [redacted]
Sent: Saturday, March 20, 2021 5:47 PM
To: Samaras, Paul; Planning
Subject: Re: Pacific Coast Commons Proposal

Any update on this? Did you receive it?

Sincerely,
Jed Montgomery

I9-1

On Fri, Mar 12, 2021 at 2:40 PM Jed Montgomery [redacted] wrote:

Hello Mr. Samaras,

I live near the proposal site. I was wondering if this is adopted what the city is doing, thinking of doing, or requiring developer to do in order to mitigate any potential negative impacts?

1. Issue parking permits for all surrounding streets that **excludes** any Hotel, Restaurant, Retail and PCC resident?
2. Speed bumps along Washington St between Mariposa and Maple to deter short cutters when traffic backs up at Mariposa/PCH or just close off Washington Street access from Mariposa altogether ?
3. Plant dense tall hedge on west side of parks to dampen propagation of noise pollution ?
4. Fund a Residential Sound Insulation program for homes with largest noise impact? Dual double pane windows
5. Require developer to buy noise easements?
6. Change adjacent Park hours to mitigate potential of unwanted activity and/or noise? Currently, I believe they are technically all 24 hrs / day

Sincerely,
Jed Montgomery

I9-2

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Response to Comment Letter I9

Jed Montgomery
March 20, 2021

I9-1 This comment consists of a follow-up to Comment Letter I6 and requests confirmation that the commenter's email was received by the City. The commenter's email (which is categorized as Comment Letter I6 in this chapter of the Final EIR) has been received by the City and is included in this Final EIR for review and consideration by decision makers.

I9-2 This comment consists of the email that comprises Comment Letter I6. As such, refer to Response to Comment Letter I6 for responses.

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Comment Letter I10

From: Antoine Michael [redacted]
Sent: Sunday, March 21, 2021 10:01 AM
To: Samaras, Paul
Subject: Pacific Coast Commons – Rejection

To whom it may concern,

As an El Segundo resident living on Washington Street, I'd like to formally reject the PCC proposal to build multiple apartment complexes.

The city feels like it has been on a steady decline in quality (increased vandalism + homelessness) already as it is and this would further push those issues.

The reason anyone moves to El Segundo is to get the benefits of a small neighborly community, which is rare in West LA. Crowding the city with high density apartments changes the entire vibe of the city and the current residents should have a say in whether or not they'd like that.

I10-1

Thanks,
Antoine

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Response to Comment Letter I10

Antoine Michael
March 21, 2021

I10-1 This comment expresses opposition to the proposed Project's housing component. Additionally, the comment states a concern for a decline in the quality of life in the City with an increase in vandalism and homelessness. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I11

From: McKenna Wilson [redacted]
Sent: Monday, March 22, 2021 11:49 AM
To: Samaras, Paul
Subject: Concerns about PCC proposed 6 story apartment complexes

Hello City Planner Paul Samaras,
I was made aware of the Pacific Coast Commons (PCC) proposing multiple high-density 6 story apartment complexes, 263 units, around me and I am very concerned. I live on the corner of Mariposa and Illions in the 9 unit condo buildings and the traffic has gotten increasingly worse over the past 6 years. Not taking into account where people are going to park and how the complexes will impact this community is something I strongly suggest looking into. Illinois Street and Indiana Street are heavily populated with cars parked from the surrounding business including Grand Motorsport, Bizhaus, Insight Investment Counsel, Walgreens, and the W XYZ bar. I11-1

Adding more residents would increase the density of this area significantly. There are already issues with parking with construction going for almost a year, on Illinois Street between E. Pine Ave and E. Holly Ave. This area already has a high volume of apartments and I am fully against the construction of the 6 story complexes around me. I11-2

If you have any further questions, please don't hesitate to reach out.

Thanks

McKenna Wilson
C: (310) 600-8109

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Response to Comment Letter I11

McKenna Wilson
March 22, 2021

I11-1 The commenter raises concern over increase in traffic and parking demand that could occur with the development of the proposed Project. The commenter notes that the streets adjacent to the Project site are already experiencing traffic congestion and parking shortages due to construction and development of high-density apartment complexes. For response to concerns regarding increased traffic along streets adjacent to the Project site, see Response to Comment I7-4.

I11-2 This comment addresses concern for parking-related construction impacts. The shortage of availability of parking in the area during construction is discussed in Section 4.13 of the Draft EIR. As such, and as further detailed in Section 4.13, the City would implement the following requirement as a condition of Project approval:

- If the timing of the proposed construction of PCC-South and PCC-North (i.e., Phase 2 and Phase 3) would overlap and the total parking demand would exceed the total parking supply, the Project applicant/developer would be required to accommodate the excess parking demand at an off-site location and provide shuttle service to and from the Project site accordingly to ensure that that parking is adequately provided during short-term construction activities. (Draft EIR Section 4.13, Development Agreements/Conditions of Approval, page 4.13-10)

Once the proposed Project and other related projects are constructed, the availability of parking would return to normal conditions that existed during the pre-construction phase. No changes or additions to the project description or environmental document are required in response to this comment.

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Comment Letter I12

From: Stephanie Jordon [redacted]
Sent: Monday, March 22, 2021 6:01 AM
To: Samaras, Paul
Subject: High density apartments

Dear Paul,

I Brenton C Graham @ 1630 e palm Ave

Unit 08 El Segundo , Ca have Air rights.

The parking structure would be blocking my

View of the mountains and the view of PCH.

I did not purchase my property 25 years ago

To look at a parking structure. This is not

An eminent domain situation.

Sent from my iPhone

I12-1

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Response to Comment Letter I12

Stephanie Jordon and Brenton C. Graham
March 22, 2021

I12-1 This commenter states that they reside in El Segundo and that the proposed parking structure would block the commenter's view of Pacific Coast Highway and of the mountains. The commenter further states that the Project does not involve eminent domain.

The uses that are proposed directly adjacent to the commenter's address include a proposed fire access lane and townhomes, which are consistent with the adjacent multi-family residences at 1630 Palm Avenue. The aesthetic impacts of the proposed Project, including its impacts on public views, have been evaluated in Section 4.1 of the Draft EIR. This analysis determined that the proposed Project would not have a substantial adverse effect to existing scenic views of the mountains, the coastline, or beaches as viewed from public vantage points. Generally, views of a highway (such as the Pacific Coast Highway) are not considered scenic. Effects on private views are not considered impacts on the environment under CEQA. Furthermore, the proposed Project does not involve eminent domain in any manner, as the proposed Project is completely within the private ownership of the Project applicant, with the exception of the off-site roadway improvement at Mariposa Avenue. Nevertheless, the commenter's concerns regarding views of the Project from their property will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I13

From: Maggie Matchett [redacted]
Sent: Monday, March 22, 2021 12:29 PM
To: Planning; Samaras, Paul
Subject: NO - High Density Apartments

WE DO NOT SUPPORT HIGH DENSITY APARTMENTS IN EL SEGUNDO

Our family will not support it, nor will we support any elected official who supports it.

We own three lots in town and will happily sell and move onto PV if this place gets over crowded.

I'm sure many others will as well.

I13-1

Thank you,
Maggie Matchett & Family

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Response to Comment Letter I13

Maggie Matchett
March 22, 2021

I13-1 This comment expresses opposition to the proposed Project's housing component. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

The comment further states they will move if the City gets overcrowded. As discussed in Section 4.11, Population and Housing, of the Draft EIR, the proposed Project would provide a resident population that exceeds the Southern California Association of Government's (SCAG's) projections. However, the proposed Project would support SCAG's goals and strategies for growth in the region by developing new housing which would improve the City's job/housing balance. As such, impacts related to population growth were found to be less than significant. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I14

From: LGA@310[redacted]
Sent: Monday, March 22, 2021 5:11 PM
To: Samaras, Paul
Subject: Re: El Segundo Pacific Coast Commons project

Hello Paul,

Thank you so much for your time today and for providing me with this information. I will definitely look into this project.

I'll also provide you with a picture and information on what I'm hoping to do in the front of my house.

I14-1

Thanks, again.

Best regards,

Lizabeth Allen

Sent from my iPhone

On Mar 22, 2021, at 3:26 PM, Samaras, Paul <PSamaras@elsegundo.org> wrote:

Hello Ms. Allen,

It was nice speaking with you. Per our conversation, I have added you to our email list for the Pacific Coast Commons project. In addition, if you would like to learn more about the project you can follow the link below to our "active projects" page on the City webpage. Please look for the Pacific Coast Commons (EA 1248) section. There is a link to the Environmental Impact Report (EIR) for the project and its appendices.

https://www.elsegundo.org/government/departments/development-services/planning-division/active-projects

As I mentioned during our conversation, I would encourage you to submit your comments/concerns about the EIR or the project in general in writing. Just email me back with your thoughts, and I will make sure your comments are part of the record for the City Council to consider.

Regarding your own project at your residence, please email me your address and a detailed description of what you're trying to do and I will confirm whether or not a permit is required. A photograph will be helpful as well.

I14-2

Thanks,

Paul Samaras, AICP
Principal Planner
City of El Segundo

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Response to Comment Letter I14

Lizabeth Allen
March 22, 2021

I14-1 This comment presents an email communication from the commenter to City staff, which acknowledges receipt of Project information as well as a non-related comment concerning improvements to commenter's property. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I14-2 This comment presents an email communication from City staff to the commenter, which notifies the commenter that they have been included in the email communication listing for the proposed Project. In addition, City staff provided a link to the City's website which contains the Project's Draft EIR and technical appendices. City staff encouraged the commenter to provide written comments or concerns about the Draft EIR. Lastly, City staff acknowledged a non-related comment regarding improvements to the commenter's property. This comment does not contain specific concerns regarding the adequacy of the Draft EIR; no further response is required.

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Comment Letter I15

From: PAUL TRUMP [redacted]
Sent: Friday, March 26, 2021 9:47 AM
To: Samaras, Paul
Cc: Planning
Subject: 401-575 N. PCH Applicant MAR CDC Holly, LLC

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras: We write to strongly oppose allowing the development of new homes at the above address. For the same reasons that the City opposed LAX modernization on March 17, 2021, we to strongly oppose this project based on our concerns about increased noise pollution, negative affects to the air quality and traffic congestion impacting residents and other business. Mariposa is in the middle of this town and feeds traffic for people using the retail locations on the east side of PCH and Mariposa. Adding another 200-400 cars a day to the intersection would create extreme traffic congestion, noise, pollution and residential impacts. I15-1

My wife and two kids have lived at 1523 E. Mariposa, two blocks from the proposed location, for the past 24 years. In those 24 years we have seen many changes on this side of town. We have seen the addition of McDonalds to most recently In-N-Out. When the Hacienda hotel was operating their ballroom we would experience an increase in traffic, a reduction in parking, and an increase in trash left on the street. The traffic and trash have only increased with In-N-Out and people working from home. No longer is this City a peaceful Mayberry but slowing becoming a City based on the taxes provided by large companies, ADU's, and any other way it can increase revenue. I15-2

Today, if you look along Washington and Illinois in the early morning when the parks are empty, almost all street parking is taken. It is my belief that this is due to the number of people living in the apartments and townhomes on the streets the intersect Mariposa. For those of us that live within blocks of the proposed location, we would see increased parking along already congested streets and potential litter. There was a time when after nine or ten at night Mariposa would be almost empty, but not today. Traffic is a constant and the Fire and Police activity is a nightly event. By substantially increasing the population in this area, as well as the draw of shoppers, the area cannot handle the increases in traffic or noise. I15-3

We ask that the City please deny any developers request to add new homes along PCH as requested.

Thank you,
Paul and Cami Trump
1523 E. Mariposa Ave

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Response to Comment Letter I15

Paul and Cami Trump
March 26, 2021

I15-1 The commenters raise concern over development of the proposed Project because it would potentially increase noise, air, and traffic impacts to the residents and businesses in the area and especially along Mariposa Avenue.

As analyzed in Draft EIR Section 4.2, Air Quality, the proposed Project would result in less than significant impacts regarding the Project's potential to result in a cumulatively considerable net increase of criteria pollutants as well as the Project's potential to result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Mitigation was incorporated to reduce the Project's potential to expose sensitive receptors to substantial pollutant concentrations, thus, reducing the potential impacts to a less-than-significant level. Therefore, the commenter's concern for air pollution along Mariposa Avenue and the potential impacts to existing residential are analyzed in the Draft EIR. Although, the Draft EIR also determined a significant and unavoidable impact related to Project's potential to conflict with or obstruct implementation of the applicable air quality plan, these impacts considered on a regional scale (e.g., South Coast Air Basin). Furthermore, the determination is based on an exceedance in population growth projections in the Air Quality Management Plan and not related to the commenter's concern for vehicular emissions. No change is required.

Section 4.13, Transportation, of the Draft EIR analyzed the Project's potential impacts related to transportation and determined less than significant impacts would occur. As such, the Project would be consistent with existing programs, plans, ordinances, and policies addressing the circulation system; would be consistent with Section 15064.3(b) of the State CEQA Guidelines; and would result in less than significant impacts related to design hazards and incompatible uses. Mitigation was incorporated to reduce potential impacts related to emergency access. The commenter's concern for traffic congestion along Mariposa Avenue was analyzed within the Draft EIR and considered within the Project's design. In fact, implementation of the proposed Specific Plan includes site-specific development standards. Development Standard C.1 would reconfigure the eastbound lane of Mariposa Avenue at PCH from one left lane and one through-right lane to one left, one through, and one right-turn lane. The proposed right-turn lane is recommended to accommodate peak-hour 95th percentile queues. This infrastructure improvement has been taken into account for the plus-Project scenarios of the transportation impact analysis (i.e., Level of Service Analysis [LOS] for General Plan Consistency). Specifically, the Future plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Future Base and Future plus Project with improvement conditions at Mariposa Avenue. The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1).

With respect to noise, Table 4.10-6 of the Draft EIR includes assessment position "ST4", located on the corner of Illinois Court. and Mariposa Avenue. At this position, the change in traffic noise due to the

Project is expected to be a reduction, not an increase, due largely to the introduction of PCC buildings as occlusions to direct sound paths from PCH.

I15-2 The commenters state concerns with the recent commercial development in the area has changed the character of the neighborhood due to increased traffic congestion, reduced parking availability and an increase in trash accumulation on streets. This comment does not pertain to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I15-3 The commenters state that there is an existing lack of on-street parking in the area and the proposed Project would cause a further increase in parking demand and traffic due to the addition of new population in the area.

For response to concerns regarding increased demands for parking in surrounding neighborhoods, see Response to Comment I6-2.

Comment Letter I16

From: Neil Cadman [redacted]
Sent: Friday, March 26, 2021 4:12 PM
To: Samaras, Paul
Subject: Pacific Commons Development

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul.

As a business owner, homeowner, and operator of a building across the street from the development (1729 E. Pine Avenue), I fully support the Continental Development/Mar Ventures proposed development of the parking structures and apartment/retail buildings on PCH. I16-1

Concerned about traffic, but we always adapt!

Thank you.

Neil R. Cadman, CPM®
President

214 Main Street #361
El Segundo, CA 90245
310-606-5894
ncadman@cadmangroup.net
www.cadmangroup.net
DRE #01061980

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Response to Comment Letter I16

Neil Cadman
March 26, 2021

I16-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

The comment further notes concern for traffic as a result of the proposed Project. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. The commenter's concern for traffic may relate to traffic congestion which is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines. Impacts related to vehicle miles traveled were found to be less than significant, no mitigation is required.

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Comment Letter I17

From: Frank Glynn [redacted]
Sent: Friday, March 26, 2021 5:23 PM
To: Samaras, Paul
Subject: Pacific Commons Project

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul:

I would like to register my support for the Pacific Commons project.
The parcels of land for proposed development have been a blight for as long as I have lived in town (26 years).
The developers have actively responded to the concerns raised by the community, and have created an appropriately scaled project.
I am fully in favor of mixed use developments that assist the City in meeting the mandated RHNA goals and that activate the street.

I17-1

Best wishes,

Frank

FRANK GLYNN AIA
www.sagarchitecture.com
Tel [redacted] Mob [redacted]

SAGA
architecture

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Response to Comment Letter I17

Frank Glynn
March 26, 2021

I17-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I18

From: Frances de Freitas [redacted]
Sent: Sunday, March 28, 2021 11:21 PM
To: Samaras, Paul
Subject: Pacific Coast Commons Comments

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul.

I live one block from the proposed development and am very concerned about the negative impacts from a six story apartment complex to our neighborhood. I18-1

Pacific Coast Commons Comments.

- A question was asked at the Environmental report scoping
- meeting about studying the impact charging for parking at Pacific Commons would have on parking on nearby residential streets, (Original Question. Will analysis be performed to understand the impact of charging for parking on the density of cars parked on
- surrounding neighborhood streets?) I understand parking is outside of the Environmental impact report but all analysis in the report assumes everyone would use Pacific Coast Commons provided parking. This assumption is flawed as people will not pay for the
- parking if there is free street parking. We already see this fact at the Fairfield and Aloft hotel where many guests opt to park on the street instead of paying for parking. Parking on Washington/Palm is already full each day due to people who work in nearby
- office buildings (near PCH and Imperial) which charge for parking as people who work there opt to park for free on our streets. A parking district was created near these office buildings but that only pushed the problem to the edge of the parking district
- around Palm Ave. Here there are numerous existing apartments and condos on Palm Ave between PCH and Washington Street with inadequate parking which already makes parking impossible on street cleaning days. The parking issue must be addressed and resolved
- (outside of the Environmental report) as apartment residents will clog the streets in front of our homes instead of paying for parking at the proposed complex. I18-2
-
-
- There is already a backup of cars to make a left turn
- from Mariposa onto PCH and adding traffic from all the people from a six story apartment and business building, it is extremely likely that people will take other streets such as Washington to go around the traffic, but Washington Street and Mariposa Ave are
- not studied in the report. Analysis of the impact of traffic on Washington Street must be included as it lies directly behind project location and will be used as a cut through due to congestion on Mariposa I18-3
-
-
- The metro Green line is unreasonably far for people to
- walk to and people do not use the 232 bus to connect to it due to its infrequent service I18-4
-
-
- The traffic analysis hinges on people actually using I18-5

1

- the Mass Transit services but no analysis was done of current use of these services by people who already live in the same vicinity. The report uses generic assumptions that do not represent the people living here. The findings of such a survey would likely
- contradict the transport claims made by the environmental impact report. People who currently live here do not use MassTransit nor walk to nearby services.

I18-5 Cont.

- Someone at the scoping meeting also said ""I am a resident
- on Palm Avenue and permit parking would be necessary for current residents." When will the rest of the questions that are outside of the Environment Report get addressed?

I18-6

- Need to address the sound from the airport bouncing off
- a 6 story building into the surrounding neighborhood

I18-7

- The report did not truly study the impacts of this massive
- project in our neighborhood. It used generic data which does not represent reality here to get this project approved. It did not adequately address any of the actual issues with this project

I18-8

Thank you in advance for helping keep our neighborhood from being negatively affected from this massive development. Please let me know if you need any further information or clarification.

I18-9

Frances de Freitas

2

Response to Comment Letter I18

Frances de Freitas
March 28, 2021

I18-1 The commenter states that they live one block from the proposed Project and are concerned about the negative impacts of the proposed Project in their neighborhood.

The proposed Project has been assessed for its impacts on the environment as part of the Draft EIR. Effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[7] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.). As such, the potential environmental effects of the Project on its surroundings (including the surrounding neighborhood) have been evaluated and disclosed in the Draft EIR, and any identified significant impacts would be mitigated to the extent feasible. The commenter's concerns regarding negative impacts to their neighborhood will be included as part of this Final EIR for City decision makers' review and consideration.

I18-2 This comment raises concerns regarding the impact of charging for parking at the Project site on the surrounding neighborhood streets. The main concern expressed is that people will not pay for parking at the Project site if there is free street parking in the surrounding neighborhoods. While the hotels will continue to charge for parking on site, the retail uses will provide free parking with validation. Furthermore, the Project will be including the cost of parking within the residential rents and will not charge residents separately for parking.

While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns (see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR). Based on the results of parking evaluation (Shared Parking Analysis, Fehr & Peers, February 2021) and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street. The Project applicant would work with residents to suggest the boundaries of this potential permit parking district. A permit parking district is implemented by the City at the request and approval of the residents. The proposed Project would not prohibit the formation of permit parking, but it is not required for the proposed Project.

I18-3 This comment raises concerns regarding the volume of traffic making an eastbound left-turn from Mariposa Avenue onto Pacific Coast Highway. The main concern is that because there is already a high

[7] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

level of vehicle volumes turning left at this intersection, vehicles will use other streets such as Washington Street to head north.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As detailed in this informational analysis, pre-COVID traffic counts show 120 vehicles per hour (vph) turning left in the AM peak hour and 107 vph in the PM peak hour (approximately 2 vehicles per minute) from eastbound Mariposa Avenue to northbound Pacific Coast Highway. The Project is projected to add 36 vph in the AM peak hour and 29 vph in the PM peak hour (approximately 1 vehicle every 2 minutes) to this movement. The analysis shows that this intersection operates at Level of Service (LOS) C under existing conditions (acceptable according to City of El Segundo standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a project feature. This right-turn lane is projected to improve capacity (i.e., less vehicles per lane per hour) at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project (and no right-turn lane) to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane.

Therefore, the Draft EIR estimated that Project traffic wanting to go north on Pacific Coast Highway would use Mariposa Avenue. Even if a disproportionately high percentage, such as 25%, of the Project traffic desiring to travel north on Pacific Coast Highway were to use Washington Street to Maple Avenue or Walnut Avenue instead, the effect on Washington Street would be small, with less than 5 cars every half hour on average during peak hours. This would not result in an impact pursuant to CEQA and no changes to the Draft EIR are required.

I18-4 This comment states that the Metro Green Line station is “unreasonably far for people to walk to” and that “people do not use the Metro bus line 232 to connect to the Metro Station.”

The Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR; note that “Metro Green Line” is also referred to as “Metro C Line”). The Project site is located approximately 0.51-mile from the Mariposa Station. This distance equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours.

The commenter does not provide evidence that the distance between the Project site and the Mariposa Station is an “unreasonable walk” or that Metro Route 232 is not used to provide connections to the Mariposa Station.

The Project site is also located in proximity to other regional transit lines and to a wide diversity of land uses and services within reasonable walking distance. These factors, in combination, support and substantiate a conclusion that a portion of Project-related trips would be made via walking, bicycling, and/or transit. While the precise number of Project residents, employees, and patrons who would use

alternative modes of travel is unknown, a 5% trip credit was taken for walking, bicycling, and transit use, which is considered a conservative estimate, particularly given the transit services that are available in the Project area and the urbanized nature of the Project vicinity. Furthermore, U.S. Census data from 2019 shows that 6.7% of residents in the City take transit, walk, or bike. As such, analysis associated with the proposed Project's vehicular trips assumes that a small fraction of future Project residents, employees, and/or patrons would use transit, walking, and/or bicycling. As such, the Project's vehicular operational analysis which addresses traffic and intersection levels of service remains conservative in nature.

I18-5 This comment states that the traffic analysis hinges on the use of mass transit but that local residents do not use mass transit or walk to nearby services. The commenter states that the analysis uses generic assumptions that are not representative of local conditions and that findings of a local survey of transit use would likely contradict the assumptions used in the EIR.

See Response to Comment I18-4, which also addresses concerns regarding the EIR's assumptions related to alternative modes of transportation. As stated in Response to Comment I18-4, the trip credits taken for walking, bicycling, and transit use are minimal and conservative, particularly given the urbanized nature of the Project vicinity and the availability of transit services in the area. Furthermore, increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). Additionally, plans and policies are in place at the local, regional, and state level to support and encourage increased use of alternative modes of transportation. As these plans and policies are carried out, use of alternative modes of transportation (transit, walking, and bicycling) is expected to increase over time, particularly in urbanized areas.

Additionally, see Response to Comment I7-4, regarding VMT analysis (conducted using the SCAG travel demand model and documented in Section 4.13 of the Draft EIR) of the proposed Project, which demonstrates that that Project site is in a travel-efficient location served by bus routes and Metro C Line.

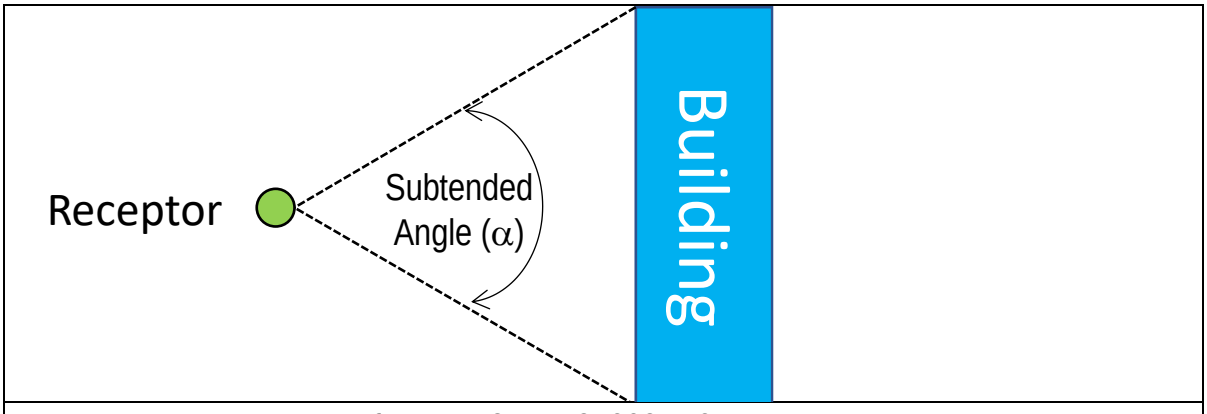
I18-6 This comment incorporates a question that was asked by another commenter at the EIR scoping meeting regarding parking permits for current residents. The commenter then asks when the questions not pertaining to the EIR will be answered by the City. As described in Draft EIR Section 1.5.2, Scoping Meeting, attendees of the webinar were able to provide comments and questions about the proposed Project to the City, the applicant, and the CEQA Consultant during the questions and answers portion of the meeting. Five comments/questions with environmental concerns during the Scoping Meeting (including the referenced commenter) are provided in Table A of Appendix A-2. This table cited Section 4.13, Transportation, of the Draft EIR for more information. Nevertheless, the comment regarding parking permits will be provided to City decision makers for their review and consideration as part of this Final EIR.

I18-7 This comment raises a concern about a multi-story building reflecting airport (aviation traffic) noise into its surrounding community.

Noise from LAX aviation traffic associated with the nearest southern runways travels approximately 4,000 feet before reaching the Project vicinity, by which time it has attenuated due to distance and other effects. This demonstrates why the Project vicinity is beyond the LAX aviation noise 65 dBA CNEL contour, as shown in Figure 4.10-2 of the Draft EIR. The diffuse noise from LAX aviation traffic impinging upon a proposed Project building façade would either be absorbed, diffracted, or reflected by its surface. But for a building façade that is porous (e.g., a parking garage), some sound would travel through the building unimpeded. The anticipated added sound contribution to an offsite receptor would depend on several variables that include its distance to the reflecting façade, the length of the façade, and the acoustical characteristics of the reflecting facade.

For an offsite receptor such as multi-family homes on the west side of Indiana Street, an introduced Project building façade across the street would present a surface that would reflect some LAX aviation traffic noise towards it. But the reflecting façade is not infinite in horizontal extent or height, nor would it be considered a perfect reflector, so the anticipated effect would be limited to no more than a 3 dB increase of the LAX aviation noise contribution to the outdoor sound environment at this nearby receptor. This situation would be analogous to a receptor near a highway, where a noise barrier installed on the opposite side and parallel with the highway reflects the roadway noise towards the receptor and for which Caltrans expects would be a maximum 3 dB increase.[8] The proposed Project building façade surface would not be considered a perfect reflector, as it would feature some irregular geometries that would help scatter or diffract sound, and the combination of window glazing and non-glazing elements would absorb noise that would then be re-transmitted to the building interior spaces.

The amount of actual reflection from this 3 dB ideal maximum, based on receptor proximity to the façade having finite length, can be approximated much in the same way that actual noise reduction from a finite-length noise barrier is less than ideal and can be estimated as shown in Figure 18 from Chapter 5 of the Housing and Urban Development (HUD) Noise Assessment Guidelines.[9] In summary, the more distant a receptor is to a barrier, the smaller is the angle "alpha" subtended by the endpoints of the barrier with the receptor at the vertex.



Estimated Building Façade Reflection = 3 dB – 3*COS(α/2)

[8] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

[9] United States Department of Housing and Urban Development (HUD). HUD Noise Guidebook. Date Published March 2009. https://www.hudexchange.info/sites/onecpd/assets/File/Noise-Guidebook-Chapter-5.pdf

Likewise, for a multi-family receptor across Indiana Street from a proposed Project building having length that would make angle "alpha" equal 45 degrees, the anticipated reflection of the incoming sound would be less than a 0.23 dB increase of the directly-received sound source. Only if the receptor were very near the façade, so that angle "alpha" approaches 180 degrees, would the estimated reflection, before application of any façade surface effects, be very close to 3 dB.

For a much more distant receptor, such as a single-family home in the neighborhood west of Washington Park, and ignoring façade surface effects and any sound path occlusion from intervening structures between it and the proposed building façades, the estimated reflection would be less than 0.01 dB for any angle "alpha" less than 9 degrees.

Thus, and for these above reasons, the expected LAX aviation noise increase due to proposed Project building reflection would be less than 3 dB, which is a less than perceptible difference and thus considered a less than significant impact. While this information regarding aviation noise effects has been added as part of this Final EIR, this additional information does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)). Operational noise impacts would remain less than significant.

Furthermore, addition of the proposed Project buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the nearby multi-family homes and more distant single-family home neighborhoods to the west of the Project site.

I18-8 This comment states that the "report did not truly study the impacts of this massive project in our neighborhood," that it "used generic data which does not represent reality here," and that "it did not adequately address any of the actual issues" associated with the proposed Project.

This response assumes that the commenter is referring to the Draft EIR in their comment. The Draft EIR has been adequately prepared under CEQA to serve as an informational document for decision makers and the public. See Response to Comment O3-2 for further information regarding the adequacy of the Draft EIR and its compliance with CEQA. Potential effects to the surrounding neighborhood and residents are discussed in the Draft EIR; see Response to Comment I18-1. The analysis in the Draft EIR is not generic; rather, the analysis is based on the existing setting of the Project area, including environmental factors and characteristics that are specific to the Project site and its vicinity, and a detailed description of the proposed Project, as set forth in Chapter 3, Project Description of the Draft EIR. The Technical Appendices C through L to the Draft EIR include analyses and modeling that is customized to the specific characteristics of the proposed Project. The comment does not provide any specific examples of "generic data" and no further response is necessary.

I18-9 This comment concludes the letter and does not express any additional issues pertaining to the environmental analysis in the EIR. No changes or additions to the project description or environmental document are required in response to this comment.

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Comment Letter I19

From: stephanie sauter [redacted]
Sent: Sunday, March 28, 2021 4:14 PM
To: Samaras, Paul
Cc: Boyles,Drew (Mayor)
Subject: High density apartment building in ES

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras,
I've seen some postings about the possibility of new housing along Sepulveda Blvd. I wanted to write in support of any project that increases the availability of housing in El Segundo.
As we're all aware, the state (county, city) has a serious housing crisis. Without building additional housing stock, that crisis will not end. I understand El Segundo is a town that like things they way they are. However, the status quo is not sustainable. We need to think progress, not be stuck on "how things have always been here."
My husband and I would both like others to be able to share in all the wonderful things that the community of El Segundo offers its residents.

I19-1

Best,
Stephanie Sauter & Paul Kelly
526 Arena Street
El Segundo

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Response to Comment Letter I19

Stephanie Sauter & Paul Kelly
March 28, 2021
Date

I19-1 This comment expresses support for the proposed Project and cites the proposed housing component. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I20

From: William WATKINS [redacted]
Sent: Monday, March 29, 2021 7:34 PM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras,
I support the Pacific Coast Commons project. I believe it will be an excellent use of the property around the west side of Pacific Coast Highway and Mariposa Ave.
Thank you,
---Bill Watkins
327 E. Oak Ave., El Segundo

I20-1

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Response to Comment Letter I20

Bill Watkins
March 29, 2021

I20-1 This comment expresses support for the proposed Project. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I21

From: Matthew Klemp [redacted]
Sent: Thursday, April 1, 2021 10:49 AM
To: Samaras, Paul; Planning
Subject: Pacific Coast Commons DEIR Comments
Attachments: EIR Extracted Pages with Comments and Summary ABBREVIATED v1.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Mr. Samaras,

Please find attached my questions/comments on the DEIR in pdf format. These comments are in a condensed format.

If you would like to see a fuller view of the same comments (although 1 version older) with full pages extracted from the DEIR please go the the website: https://tinyurl.com/EIRreview

Kindly confirm receipt of this email.

Regards,
Matthew

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Comments and Questions

El Segundo Construction Proposal
Pacific Coast Commons
Environmental Impact Review Report

(Excerpts from the report will be in *black* and my comments will be in *blue* or will be screenshots from the long form of my review.)

EIR Review Summary

- Key underlying assumptions and standards for project success are wishful thinking:
  - Many people will take mass transit
  - Many people will walk to mass transit
  - Many people will walk to downtown El Segundo from PCH
  - Significantly fewer cars at the new developments
  - Supply of new parking
  - Studies cited and manuals used in Report to support the above bullet points absolutely do not represent the El Segundo area nor broader metropolitan area.
  - Narrow assumptions and standards expose a **huge downside risk** which could blindside the City
  - Traffic Study in no way reflects the reality of the congestion in the area, epicenter being PCH/Mariposa as ANY commuter in the morning will tell you.

I21-1

- Los Angeles does not have widespread, reliable mass transit, nor has it been adopted by any significant amount of population by any stretch of the imagination. Los Angeles has tried for decades and failed at it.
- Don't put the cart before the horse. We need a much better transit infrastructure and citizenry adoption therein before we erect housing to capitalize on it.

I21-2

- Exclusion of key review areas:
  - Mariposa traffic to Downtown El Segundo
  - Current mass transit and pedestrian circulation in lieu of vehicle use in the immediate area
    1. Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?
    2. Currently, people from the area (excluding exercise) do not walk downtown nor to transit.

I21-3

  - LAX noise wasn't even studied: noise tends not to attenuate as much since PCH is a wide open tunnel for noise to run and echo off tall structures, unlike other topographical areas with differing shapes, materials, and structure.
    1. El Segundo proudly stood against LAX noise and expansion, now it's not a concern for this area? 65dBA contour aside, this noise will increase. This is also in agreement with the City Manager's office recent review of LAX expansion efforts.

I21-4

  - Parks
    1. The study said there is no impact and dismissed it.
    2. There are literally 3 huge parks a stone's throw away from this development.
    3. Children and park goers' safety is a concern.
    4. Demand for and use of parks will change.

I21-5

  - Reasonably foreseeable impacts of traffic and noise not even explored.
    1. Scope of study far to narrow. No "What if" analysis done.
    2. Bypass or shortcut traffic not analyzed. Washington St. completely ignored.

I21-6

- Standards used to calculate additional vehicles is not representative:
  - This will significantly impact the Parking and Transportation questions and analysis.
  - Will also impact the noise generation, safety, and quality of life concerns.

I21-7

- 2 **cars per dwelling unit is the El Segundo standard** and well established throughout LA. Studies cited in the Report for a lower number definitely are not representative of the area.

I21-7 Cont.

- Noise
  - Traffic, human activity, airport
  - Single Family Homes were excluded as a "Receptor" of unwanted noise.
  - Who believes that these huge, high density apartments and commercial developments are going to exist in a vacuum of their footprint or somehow only impact PCH?
  - Existing apartment height is 2 story, the proposed is 6 story for parking garage and housing. Noise concerns as follows:
    1. That height of garage will cause vehicle noise and car alarm noise to penetrate neighboring homeowners and existing apartments.
    2. LAX noise will be amplified by PCC acting as a reflector of noise. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-8

- Parking
  - Again the estimates hinge on people not bringing the average number of vehicles to the new development
  - Supply of new parking spots overestimated.
    1. ½ space for 1 bedrooms likely not accommodate a vehicle (disregard Lionel Uhry answered already)
    2. Study used for parking demand rate underestimated.
  - Where is the overflow gonna go?

I21-9

- Traffic
  - Due to the underestimation of vehicles, traffic will be an issue in the surrounding neighborhoods.
  - Even if it were accurate, traffic will increase dramatically on Mariposa back and forth to Downtown El Segundo
  - Increased traffic on the side streets of both apartment complexes due to bypassing congested intersections highly likely.
  - Study believes adding 1 right turn lane on Mariposa Ave will fix it all.
    1. This would fix the current congestion but certainly the future would be worse
    2. People already bypass the Mariposa/PCH intersection.
    3. Compounded by the gross underestimate of new vehicles in the area.

I21-10

- High Density housing is exactly what it says. The word "high density" in and of itself is impactful. To think otherwise is silly.

I21-11

- Alternate locations still seem to be viable
  - East of PCH or south of Grand seem to be win-wins, but were dismissed. We have 0 population in approx. 75% of our City limits.
  - PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?
  - A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.

I21-12

- COVID-19 prevented the study from field verifying data.

I21-13

Executive Summary Review

ES.3.2 Project Objectives

3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.

Comment:
This can be accomplished with the project being built south of Grand or East of Sepulveda and would be win-win for City and impacted residents in the proposed location. Telecommuting has allowed many more people to work from any location. LAX is largest employer in the area and those jobs have already been spoken for by citizens who already live in close proximity to LAX.

ES.3.2 Project Objectives

6. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and City's Downtown

Comment:
This statement is not reality and a long shot to be achieved. Putting the cart before the horse. Standards used, and data collected are not representative of reality as will be noted in appropriate sections.

- *Problem with Executive Summary is that it seems to be based more in wishful thinking and finding data or a study to support it.* ***Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?*** *The underpinnings of it depend completely on something that has never been proven to work in Los Angeles nor this area. Those things are:*
  - *Well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong, I wish it would work but it just has not. If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. But we are putting the cart before the horse.*
  - *"Downtown is walkable distance."* ***It is not.*** *I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit? LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet, with the exception of telecommuting. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit* ***as consistent with El Segundo standard****. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.*

I21-14

Table ES-1. Summary of Project Impacts

Noise

- Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Impact determined to be "Less than Significant"

Comment:

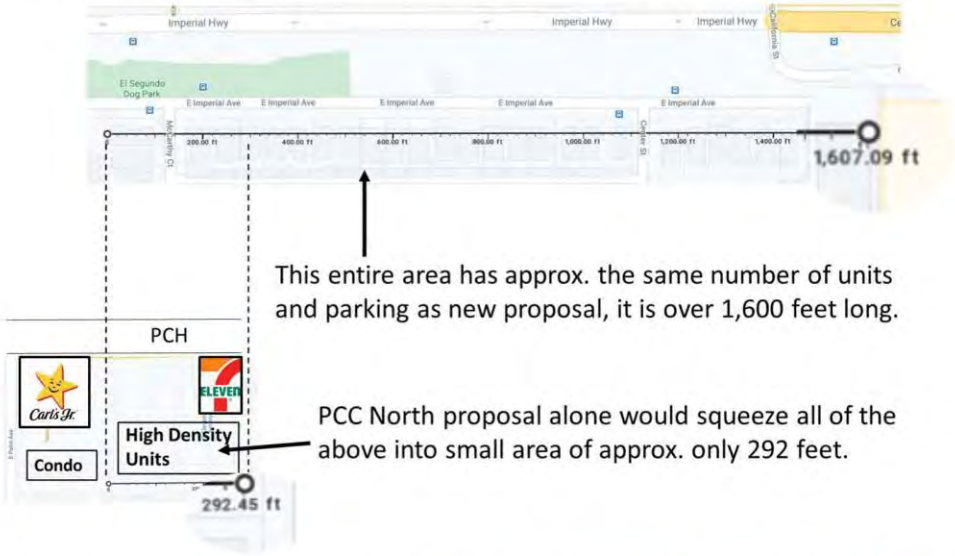
- *There will be a permanent increase in Noise*
  - *Human activity/population growth/high density*
  - *Traffic noise on surrounding streets and Mariposa all the way to downtown.*

I21-15

- *Again if this was built south of Grand or east of Sepulveda this would not impact the current residential population. The 2 ways to get into the Downtown area of El Segundo quickly, efficiently and with little to no impact to any resident in El Segundo is El Segundo Blvd and Imperial Hwy. If built south of Grand using El Segundo Blvd does not impact any residents.*

I21-15 Cont.

Super High Density for El Segundo



Proponents of project will say that the noise is attenuated here due to distance, and that it's not within the 65 dBA noise contour. These both may be true, however noise **does** propagate and echo off of walls as well, it's just as much of a physical property as attenuation is. So we cannot deny that this will send more airport noise into the community, it's just a matter of physics. PCH also allows a broad clear path for noise to be unimpeded unlike other areas.

LAX noise will be amplified by PCC echoing all of that noise due to its height. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-16

This perplexes me as El Segundo has proudly held back the expansion and noise of LAX (plaque on mortuary hill commemorating it).

El Segundo as a City participates in the regular LAX noise meetings. One of the responsibilities of LAX adjacent cities is to basically plan your City to mitigate Noise. I see a mixed message here. El Segundo will build tall buildings that bounce airport noise back into the City but then vehemently reject the idea of LAX expanding and making more noise. Please see the FAA Noise Abatement Policy below:

I21-16
Cont.

Table ES-1. Summary of Project Impacts

Population and Housing

- Would the project induce substantial unplanned population growth in an area? Impact determined to be "Less than Significant"

Comment

- *Obviously this is an impact and substantial. We have never had high density apartments like this. This is, by the word itself "high density" impactful to a community and region that has never had this type of development as opposed to a community that has numerous high density housing. So this is a monumental shift in how to look at housing, so if ever there would be a time to call something impactful it would be now. The first time we try something drastically new it is impactful for better or worse. Our infrastructure to support this drastic change is not there yet, nor is the population in large part given up vehicles. Again cart before the horse.*
- *Why are we cramming such high density into an already populated area? The area this is proposed in houses 99% of our population yet encompasses less than 25% of square acreage of City limits. If it's "parking lots are a poor utilization of space" I would say even a poorer utilization of space is all of the other approx. 75% of El Segundo City limits that has no housing. Spreading out, makes more sense and it would put those new residents closer to the mass Transit that is highly touted.*

I21-17

Table ES-1. Summary of Project Impacts

Parks

- Impact determined to be "Less than Significant"

Comment

- *In this section it asks if Parks will be impacted and the summary says "no". There are literally parks that are about 150' away ALL ALONG THE PROPOSED DEVELOPMENT SITE!*
- *Freedom Park, Washington Park, Constitution Park are all literally a stone's throw from the site. Unless the term Park is redefined for this study, I pay extra property taxes because I live next to these parks, El Segundo Parks and Rec upkeep them as I see them all the time and they are utilized like any other park by the normal definition. This really needs some explanation.*

- *Bypass and shortcut traffic (detailed in Transportation analysis) would impact these parks and potentially be a safety hazard*

I21-18

ES.5.2 Alternative "B" page ES-31

- Reduced Development Alternative: Exclusion of PCC North

Comment

- *This would be a viable alternative. I still don't believe some of the objectives are met but it lessens the overall impact to the community.*

I21-19

ES.6 Areas of Known Controversy page ES-35

Comment

- *I will address the following bullet points from the Executive Summary in forthcoming sections:*
  - *Potential noise*
  - *Potential increased traffic*
  - *Potential parking impacts*
  - *Other impacts will be discussed later as well*

I21-20

Noise Review

4.10 Noise

4.10.1 Sensitive Receptors page 4.10-5

Comment

- *Single family homes were a glaring omission in this category. Certainly the increased human activity in general, in the parks, via traffic and parking. Single family homes are threatened by unwanted noise that has significant potential not to just **tick** up but **spike** up.*

Page 4.10-6 top paragraph: Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

Comment:

- *Single family homes seem to be completely ignored. This is not only insulting, but grossly incorrect. **Traffic** and parking will add to noise (is there a lifetime guarantee that no hotel nor PCC resident nor guest are going to park in the single family neighborhood or any surrounding street?, domino effect of parking issues now and in the near future are a reasonable concern, look no further than apartments along Imperial, they come with parking garages, are **low** density and **still** spill over into the streets.*

I21-21

Existing noise environment page 4.10-6

For purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique...However, at the time of this writing and due to COVID-19 response effects,

I21-22

commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Comment:

- *The predictive modeling does not take into account whatsoever Mariposa traffic and all the shortcut traffic through residential streets and resulting ambient noise. If the project is so confident there will be no traffic in these areas then the City should have no qualms about turning them into cul de sacs or some other traffic deterrent method to guarantee no new residents are using shortcuts. Also, only **predictive modeling** was done with no field verification. Also, as an engineer myself someone should be thinking beyond the small foot print of 100' from project boundary that is extremely tight. At minimum, the scope should have been expanded for **reasonably foreseeable** traffic and noise impacts, which was **not** done. As the study indicates they could not collect data due to suppressed traffic and noise from COVID19, so admitting we do not have conclusive nor expanded scope data to back any of this up. So this is a big risk. Therefore more weight should be put on local residents in the **immediate** area for data. Was Traffic and Noise modeled down Mariposa and back streets? I haven't seen any.*

I21-22 Cont.

Page 4.10-9:

- Goal N1: Provision of a Noise-Safe Environment.
- Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code
- Policy N1-3.1: Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Comments:

- *N1 – Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH.*
- *N1-1 – see above*
- *N1-3.1 – this fails because of the potential for future repeal of mandatory pay for garage parking therefore pushing even more cars outside besides the overflow (I know the study says there will be an excess supply but I will comment more in the Parking section.)*

I21-23

4.10.3 Page 4.10-11

The property lines of the nearest multi-family residences to the west of the Project appear to be as close as 15 feet to the PCC North,

Comment:

- *In the future transiting vehicles in and out of garage, and garage itself will have significant impact on Illinois Ct. residents.*

I21-24

Page 4.10-15:

However, at the time of this writing and due to COVID-19 response effects, commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Comment:

- *Noise levels not reliable since down during the Pandemic as stated. Traffic and noise from vehicles and aircraft down 85%*

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Table 4.10-6 shows that at all six listed representative receivers, the addition of proposed Project traffic to the roadway network would result in a CNEL value increase of less than 3 dB, which is below the discernible level of change for the average healthy human ear.

Comment:

- *This was only predictive data and no field data collected due to COVID-19*
- *The predictive element also based on faulty conclusion that there will be far less vehicles than generally accepted by City of El Segundo, LA County and LA Metropolitan standards. Discussed in later sections.*

I21-25

Page 4.10-22: Permanent Increase in Ambient Noise Levels, Off-Site Traffic

- Cumulative off-site traffic noise impacts would be less than significant.

Comment:

- *Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life, even if the traffic was silent.*

I21-26

Transportation Review

4.13 – Transportation
Page 4.13-2, 3

- The study area selected for analysis in the TIA extends to and includes Center Street to the west, Nash Street to the east, Imperial Highway/Interstate (I) 105 to the north, and El Segundo Boulevard to the south.

Comment:

- *Shortcut traffic will increase on Walnut Ave and Maple Ave*
- *Traffic in general will increase significantly all along Mariposa Ave*
- *Washington St not even mentioned and it will receive a significant amount of bypass and shortcut traffic. The addition of one more lane at PCH/Mariposa will not make enough of a dent in traffic to prevent this, plus the estimate of new vehicles in circulation is way underestimated.*

I21-27

Transportation Impact Review

The transportation impact study was completed by Fehr and Peers located in the Appendix J-1.

APPENDIX A:
LANE CONFIGURATIONS AND TRAFFIC VOLUMES
Peak 1 Hour Traffic Volumes and Lane Configurations Project Only

Comment

- *In this appendix they have graphical depictions of intersections around the project area.*
- *In this particular appendix it shows how many more vehicles will be turning at an intersection during AM and PM rush hour due to the development of the Project.*
- *PCH/Maple Ave show **0** additional vehicles turning according to the study.*
- *PCH/Walnut Ave show **0** additional vehicles turning according to the study.*
- *They expect **absolutely no vehicles** will use these intersections as alternates compared to the main one at PCH/Mariposa.*
- *The first thing I did when moving to the area was **avoided Mariposa** and went to an **alternate side street**. Many people do this as I see it all the time speeding down Washington Street to get there. The same thing happens when trying to go southbound, Mariposa is backed up even with a dedicated right turn lane and the pedestrian crosswalk, it's quicker to go down Indiana behind the hotel and get on PCH from Holly or Grand.*
- *Also, please note my experience is during non-peak hours, I work the afternoon shift. I never have had to negotiate these intersections at peak times which obviously are way worse.*
- *PCH/Palm Ave – this is directly adjacent to the apartments on the north side*
  - *During the AM rush hour shows a total of 9 vehicles according to the study*
  - *During the AM rush hour, out of the **252 parking spots** in PCC North there will only be 9 vehicles that use Palm Ave?? The numbers just seem really suspect.*
- ***Conclusion** is that we are going to have a lot of **bypass or shortcut traffic** from PCC North apartments (gas station/7-11 parking lot) location and PCC South apartments (parking lot of the Aloft Hotel)*
- *These alternate streets were dismissed in the study.*
- *No Traffic Analysis was done for the impact on Mariposa going to Downtown El Segundo. So all those residents were sort of ignored. Mariposa residents already endure speeders and traffic, safe to assume it would get much worse for them.*

I21-28

Transportation Impact Analysis Summary

- *Traffic Study in no way reflects the reality of the congestion in the area, epicenter being PCH/Mariposa as ANY commuter in the morning will tell you.*
- *The Analysis conducted for the EIR was based on the number of additional vehicles the project would bring. This number comes from the Parking Analysis. As I have shown in that respective area and others, the standards used and data collection is not representative of what we currently have going on. 2 big underlying assumptions used in the EIR is that many people are going to forgo vehicles and walk to transit and walk to Downtown El Segundo*
  - ***Big question**: Why was there no study completed to even ask or analyze whether the current population of apartments, condos and single family homes in the immediate area do any of this??*
  - *It seems like a logical step to take if this is one of your Project objectives and basis for making a judgment on a Project, especially if it could be impactful to the neighborhood and city.*
  - *I live in the immediate area and have never seen even a trickle of people walking to Transit or Downtown. Only walkers are for exercise.*
- *Standards used as basis are not representative (should simply have used realistic standard set forth by the City of El Segundo, 2 cars per unit. Also the data sampling is suspect and not representative of the immediate surrounding area.*
- *Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that but we're putting the cart before the horse.*
- *We need a culture or cost of vehicle ownership of fewer cars before housing ideas capitalize on that.*

I21-29

- *If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.*
- *We do not have well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it?*
- *The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well-established historical average of 2 cars/unit.*

- *"Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it but we have no infrastructure nor adoption by the people to meet this objective.*
- *Therefore, I believe that the following numbers should be increased by at least 33%. This number is derived from the Parking Analysis. I have attempted to contact Fehr & Peers (contracted to conduct the Parking and Transportation Analysis) but have not received a call back in regard to their analysis.*
- *Conclusion: Mariposa/PCH intersection will be inundated and cause significant short cutting on residential streets. Also, Mariposa traffic situation will be aggravated significantly. Mariposa Ave not even evaluated, the congestion, speeding and hazards to children and all residents will increase.*
- *Shortcut traffic will pass by 4 parks (Independence, Constitution, Washington and Freedom Park) creating a hazard for children and park goers.*

I21-29 Cont.

Parking Review

The Parking Analysis was completed by Fehr and Peers located in the Appendix J-2.

Page 3:
Residential Parking Demand Research
To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition
The Institute of Transportation Engineers published Parking Generation, 5th Edition in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas.

Comment:

- *Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did. LA certainly isn't a one size fits all compared to other metro areas in the country.*

I21-30

Lionel Uhry
February 17, 2021
Page 4 of 18

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

I lived in SF Bay Area, BART and CalTrain used way way more than here. They at least have some people doing it. Also CalTrain, runs right through Palo Alto and immediately adjacent Stanford University. Students living in apartments are more likely to use it. We are comparing apples to oranges here.

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
  - Proximity to transit can reduce the rate by approximately 25 percent

Actually, on the contrary we have no relevant studies whatsoever that match our community nor Los Angeles adoption nor infrastructure built. We have the opposite, decades of failed attempts of construction and adoption.

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different

I21-30 Cont.

Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

This is the most reliable and realistic demand rate for the proposal. It fits with the LA standard and has already been adopted by El Segundo Municipal Codes. Also just Google it for yourself. dataiq.usa Los Angeles. It's no big secret or conspiracy just common sense.

Pacific Coast Commons Residential Parking Demand Rate

I21-30 Cont.

El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Also remember this more realistic total will drastically change the Transportation Analysis

Table 3 shows the total parking demand based on the above demand rate.

All of these cars will need to compete with the 2 hotels, new retail units and a restaurant as well.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces	El Segundo Std : 2 cars/dwelling unit
Residential				
Studio	1 space/ bedroom	91 bedrooms	91	182
1 Bedroom	1 space/ bedroom	119 bedrooms	119	238
2 Bedroom	1 space/ bedroom	94 bedrooms	94	94 (94 rooms x 47 units)
Guest	1 space/ 3 units [a]	263 units	87	87
		Total	**391**	**601 total**

1. ITE Study not customized for LA
2. Palo Alto certainly doesn't reflect this area
3. People are not going to forgo a vehicle because they are close to transit, even if they were to use it once and a while
4. A significant number of people using transit is highly unlikely. We don't even have a study of the current population in the vicinity
5. Downtown and Transit aren't realistically walkable in any way and is not going to put a dent in the number of cars parked nor used.
6. Mass transit is aspirational, but right now hopes and dreams shouldn't be a substitute for the reality of 2 cars per dwelling unit

Page 5

Realistic vehicle estimate

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
		Total	451

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.

This 1/2 space is calculated in the total supply. How big actually is 1/2 space? Would a mid-size sedan fit? How wide is it? It's like when you see all those "compact" parking spaces in a parking garage. They're overtaken even by mid-size vehicles. My guess is that the majority of the 119 one bedrooms units will use it to store bikes or maybe a scooter. This 1/2 space skews the true supply which will then be lower.

I21-30 Cont.

Page 6

Existing Parking Occupancy

These are not peak season numbers either. Summer obviously would be peak

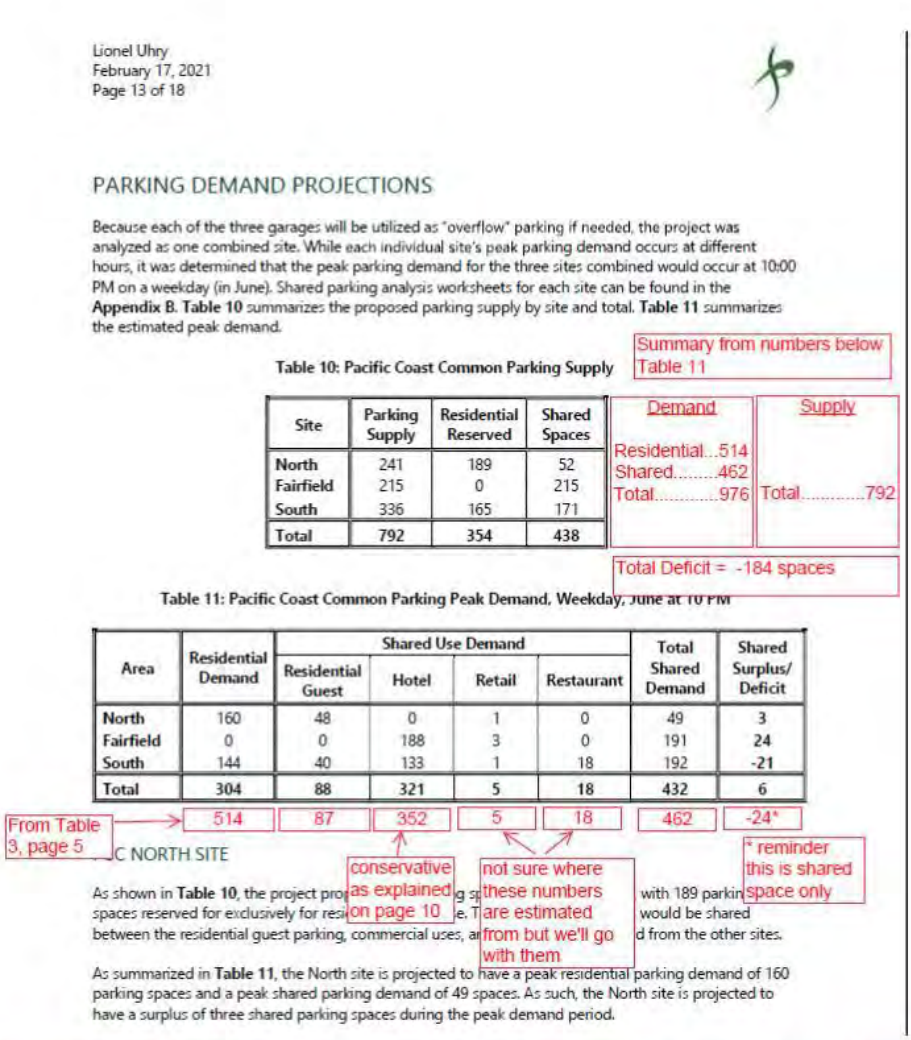
Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Sunday night? Usually Saturday night is the busiest

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352

This is based on non summer and non Saturday night data. I don't see this at all as "Peak Demand Rate". Now it may be demand rate during the low season, but not representative for the basis of such a large and potentially impactful development.



Lionel Uhry
February 17, 2021
Page 13 of 18

PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as "overflow" parking if needed, the project was analyzed as one combined site. While each individual site's peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B. Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Summary from numbers below Table 11

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	792	354	438

Demand
Residential...514
Shared.....462
Total.....976

Supply
Total.....792

Total Deficit = -184 spaces

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	3
Fairfield	0	0	188	3	0	191	24
South	144	40	133	1	18	192	-21
Total	304	88	321	5	18	432	6
	514	87	352	5	18	462	-24*

From Table 3, page 5

C NORTH SITE

conservative as explained on page 10

not sure where these numbers are estimated from but we'll go with them

* reminder this is shared space only

As shown in **Table 10**, the project pro g s with 189 parkin spaces reserved for exclusively for resi e. T would be shared between the residential guest parking, commercial uses, a d from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.

My conclusion is that we will have a shortage of parking (potentially short 184 spaces) and the subsequent Transportation Analysis will be significantly impacted.

This conclusion is based primarily on:

1. *2 cars per Dwelling Unit is a long standing average*
2. *The 1/2 space for 1 bedroom units is suspect to be effectively usable for cars or trucks by a significant number of residents.*
3. *We should be planning for at least the long standing average and reasonable foreseeable usage of parking spaces especially for a project of this magnitude for the neighborhood and city.*

I21-30 Cont.

Parking Analysis Summary

- *Standards used as basis are not representative (should simply have used realistic standard set forth by the City of El Segundo as seen on page 5, Table 2. Also the data sampling is suspect and not representative of the immediate surrounding area.*
- *Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that, but we're putting the cart before the horse.*
- *We need a culture of fewer cars or a very high cost of vehicle ownership before housing ideas can capitalize on that.*
  - *If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.*
  - *We do not have well established nor mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first, and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it? It's certainly not happening now, how will it magically happen after this proposal?*
  - *The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well-established historical average of 2 cars/unit.*
- *Also, please note the number of parking spots available total are shared between the 2 high density apartment buildings, 2 hotels, retail space and a restaurant. So this means that if parking runs out in PCC North then the individual will need walk to another structure and park their vehicle. Just don't see this ending well. This isn't mid-town Manhattan.*

I21-30 Cont.

Alternatives Review

6 Alternatives

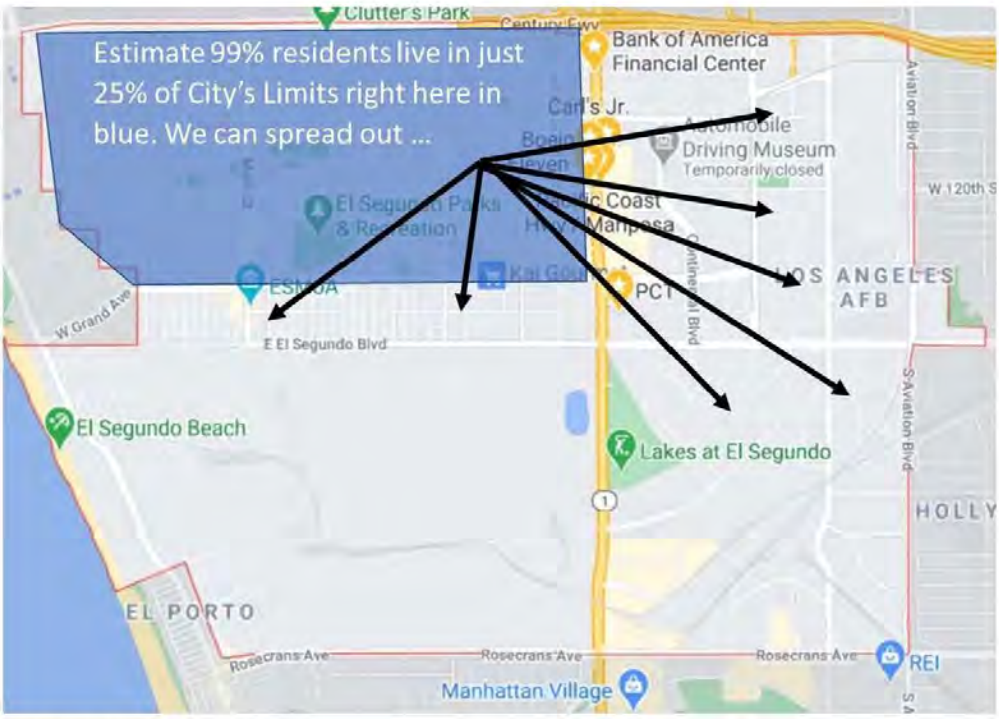
6.1 Introduction page 6-1

CEQA requires that Environmental Impact Reports (EIRs) "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"

Comment

- *Why aren't east of Sepulveda and south of Grand not viable alternatives?*
  - *They accomplish most all of the objectives much better than the current proposal*
  - *They have minimal negatives impacts to community especially compared to current proposal*
  - *It would be a win-win*
  - *We currently only utilize 25% of the El Segundo footprint for residential housing. Why can't we spread out and spread the impact?*
  - *PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?*
  - *A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across a broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.*

I21-31



I21-31 Cont.

6.2 Project Objectives page 6-2

2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities...
4. Enhance vehicular circulation through intersection improvements and street widening.
7. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

Comments:

- *Item 2: this adversely will impact neighboring residents. I don't see anything in the proposal that mitigates negative impacts to neighbors*
  - ***Traffic***
  - ***Safety (higher traffic adjacent to numerous parks)***
  - ***Parking***
  - ***Noise***
  - ***Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have***
  - ***Schools Lower teacher to student ratio***
  - ***Equates to lower quality of life and lower home values***
- *Item 4: vehicular circulation will get worse without a doubt. I will later go on to critique the EIR data but allow me to relay my personal experience. I live adjacent to Washington Park. When I first moved there it only took me a week to figure out that the Mariposa & PCH intersection is to be avoided at all costs no matter if I was headed north or*

southbound PCH. An aggravating factor is that I was seeing this always during non-peak hours. Peak hours are significantly worse. If I need to go north bound I would and will never use Mariposa, I will always bypass that intersection and head further north on Washington and get onto PCH via Maple. If I'm headed southbound I will approach Mariposa PCH and typically bypass the intersection via Indiana and pop out on Holly or Grand. These bypasses and shortcuts happened during non-peak hours, so add to this 263 more dwelling units during peak hours, traffic will increase significantly on these streets. Safety of park users will be at risk, not to mention numerous other negative impacts. New residents will figure this out just like I did, nothing surprising, everyone does it and will continue to do it. And in my opinion, and I will go into further detail later, the EIR data is severely underestimated both on standards used and data that is collected which ultimately results in recommendations on the top level Executive Summary. The devil is in the details and when you look at it, there are some serious flaws.

- *Item 7: please see "ES.3.2 page ES-6 #6 in list" above*

6.4 Alternatives... page 6-4 end of last paragraph

...the proposed site is just over 0.5- mile from the Metro C Line, whereas the Smoky Hollow Specific Plan area is farther away, thereby reducing potential access to regional transit for the Projects 618 future residents.

Comment

- *Smokey Hollow ruled due to it being a little further away from Transit, but wasn't one of the objectives to have Downtown El Segundo Walkable? This area actually is more equidistant between the 2 "walkable" areas. I don't believe people are gonna do the walking in the first place, but if someone does believe that will happen, making it more equidistant would be a better alternative.*
- *PCC site proposal was rezoned to mixed use, why can't east of PCH do the same thing?*
- *A standard density housing proposal in multiple areas, rezoning and utilizing east of PCH and Smokey Hollow spreads the impact of the housing "issue" across broader segment of population rather than forcing a few people to bear the brunt of reasonably foreseeable impacts, one being lower quality of life/devaluing property.*

6.4 Alternatives... page 6-5 middle of page

Development of the Project on another site along PCH, which could provide a similar transition from the City's offices to the east and residential uses to the west, would not be feasible because no sites are under control by the Project applicant.

Comment

- *Development somewhere else along PCH was ruled out because the Project applicant has no sites under its control. My response would be "find a different applicant that does". I'm sure it's not as easy as it sounds but this is not a small undertaking that can have significant impacts to the City so the effort would be warranted.*
- *"Moving the Project to another location doesn't avoid impacts." East of Sepulveda and Smokey Hollow certainly reduce the impacts.*

I21-31 Cont.

6.6 Summary Table page 6-34

Table 6-3, Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Reduced Development Alternative: Exclusion of PCC – North	Alternative C - Reduced Development: Reduce 1 Level from PCC-South and PCC-North
Aesthetics	LTS	▼	▼	▼
Air Quality:				
AQMP Consistency	SU	▼	▼	▼
Short-Term	LTS-MM	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Cultural Resources	LTS-MM	▼	—	—
Energy:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Geology and Soils	LTS-MM	▼	—	—
Greenhouse Gas Emissions:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Hazards and Hazardous Materials:				
Short-Term	LTS-MM	▼	▼	—
Long-Term	LTS	▼	—	—
Hydrology and Water Quality:				
Short-Term	LTS	▼	▼	—
Long-Term	LTS	▼	—	—
Land Use and Planning	LTS	▲	—	—

- Alternatives A and B all have reduced impacts in virtually every category which makes them a better possibility
- Disagree with the *Land Use and Planning* and *Transportation* for Alternatives having a greater impact for reasons already stated previously

12171
6-34

I21-31
Cont.

Agree, the "no build" alternative is the way to go

6.7 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as

Comments and Questions

I21-32

El Segundo Construction Proposal
Pacific Coast Commons
Environmental Impact Review Report

EIR Review Summary

- Key underlying assumptions and standards for project success are wishful thinking:
  - Many people will take mass transit
  - Many people will walk to mass transit
  - Many people will walk to downtown El Segundo from PCH
  - Significantly fewer cars at the new developments
  - Supply of new parking
  - Studies cited and manuals used in Report to support the above bullet points absolutely do not represent the El Segundo area nor broader metropolitan area.
  - Narrow assumptions and standards expose a **huge downside risk** which could blindside the City

I21-33

- Los Angeles does not have widespread, reliable mass transit, nor has it been adopted by any significant amount of population by any stretch of the imagination. Los Angeles has tried for decades and failed at it.

- Don't put the cart before the horse. We need a much better transit infrastructure and citizenry adoption therein before we erect housing to capitalize on it.

- Exclusion of key review areas:
  - Mariposa traffic to Downtown El Segundo
  - Current mass transit and pedestrian circulation in lieu of vehicle use in the immediate area
    1. Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?
    2. Currently, people from the area (excluding exercise) do not walk downtown nor to transit.

I21-34

  - LAX noise propagation: noise tends not to attenuate as much since PCH is a wide open tunnel for noise to run and echo off tall structures, unlike other topographical areas with differing shapes, materials, and structure.
    1. El Segundo proudly stood against LAX noise and expansion, now it's not a concern for this area? 65dBA contour aside, this noise will increase.

I21-35

  - Parks
    1. The study said there is no impact and dismissed it.
    2. There are literally 3 huge parks a stone's throw away from this development.
    3. Children and park goers' safety is a concern.
    4. Demand for and use of parks will change.

I21-36

  - Reasonably foreseeable impacts of traffic and noise not even explored.
    1. Scope of study far to narrow. No "What if" analysis done.
    2. Bypass or shortcut traffic not analyzed. Washington St. completely ignored.

I21-37

- Standards used to calculate additional vehicles is not representative:
  - This will significantly impact the Parking and Transportation questions and analysis.

I21-38

- Will also impact the noise generation, safety, and quality of life concerns.
- **2 cars per dwelling unit is the El Segundo standard** and well established throughout LA. Studies cited in the Report for a lower number definitely are not representative of the area.

I21-38 Cont.

- Noise
  - Traffic, human activity, airport
  - Single Family Homes were excluded as a "Receptor" of unwanted noise.
  - Who believes that these huge, high density apartments and commercial developments are going to exist in a vacuum of their footprint or somehow only impact PCH?
  - Existing apartment height is 2 story, the proposed is 6 story for parking garage and housing. Noise concerns as follows:
    1. That height of garage will cause vehicle noise and car alarm noise to penetrate neighboring homeowners and existing apartments.
    2. LAX noise will be amplified by PCC acting as a reflector of noise. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.

I21-39

- Parking
  - Again the estimates hinge on people not bringing the average number of vehicles to the new development
  - Supply of new parking spots overestimated.
    1. ½ space for 1 bedrooms likely not accommodate a vehicle
    2. Study used for parking demand rate underestimated.
  - Where is the overflow gonna go?

I21-40

- Traffic
  - Due to the underestimation of vehicles, traffic will be an issue in the surrounding neighborhoods.
  - Even if it were accurate, traffic will increase dramatically on Mariposa back and forth to Downtown El Segundo
  - Increased traffic on the side streets of both apartment complexes due to bypassing congested intersections highly likely.
  - Study believes adding 1 right turn lane on Mariposa Ave will fix it all.
    1. This would fix the current congestion but certainly the future would be worse
    2. People already bypass the Mariposa/PCH intersection.
    3. Compounded by the gross underestimate of new vehicles in the area.

I21-41

- High Density housing is exactly what it says. The word "high density" in and of itself is impactful. To think otherwise is silly.

I21-42

- Alternate locations still seem to be viable
  - East of PCH or south of Grand seem to be win-wins, but were dismissed.

I21-43

- COVID-19 prevented the study from field verifying data.

I21-44

Executive Summary Review I21-45

the Project site is bound by Palm Avenue on the north, PCH on the east, Holly Avenue on the south, and Indiana Street on the west. Mariposa Avenue bisects the Project site. Regional access is via Interstate (I) 105 (Imperial Highway) to PCH or via I-405 (San Diego Freeway) via El Segundo Boulevard to PCH. Access to the Project site is currently provided by PCH on the east and Indiana Street to the west.

The Project site is currently occupied by surface parking lots, the Fairfield Inn and Suites Hotel, and the Aloft Hotel. The Project would allow for the redevelopment of the existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel property within the Project site through the adoption of a Specific Plan. The adoption of a Specific Plan would allow for the following: (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures that would contain approximately 792 parking stalls.

The Fairfield Inn and Suites Hotel and the Aloft Hotel would not be redeveloped or expanded, but the zoning for the existing properties would be changed to reflect the current land uses, buildings, and site improvements. While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. Through the implementation of the Specific Plan, these two hotels would be brought into full conformity with the land use designation and zoning for the Project site. The Specific Plan's three development areas are Pacific Coast Commons – South (PCC-South), Pacific Coast Commons – Fairfield Parking (PCC-Fairfield Parking), and Pacific Coast Commons – North (PCC-North).

I21-45 Cont.

In summary, the proposed Specific Plan would allow for the redevelopment of the PCC-South, PCC-Fairfield Parking, and PCC-North and would allow for the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties within the Specific Plan boundaries, which are currently existing legal, non-conforming uses, to be in compliance with the Specific Plan. The redevelopment of the PCC-South, PCC-Fairfield Parking, and PCC-North would result in physical changes to the environment. However, the proposed development standards of the Specific Plan would not result in physical changes to the currently existing legal, non-conforming hotel uses.

ES.3.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City in developing a reasonable range of alternatives to be evaluated in the EIR. The Project objectives also aid decision makers in preparing Findings of Fact and a Statement of Overriding Considerations, if necessary. The statement of objectives also is to include the underlying purpose of a project, and may discuss a project's benefits. The Project's specific objectives are as follows:

1. Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses.
2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan.
3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.

This can be accomplished with the project being built south of Grand or East of Sepulveda and would be win-win for City and impacted residents under current location.

12171
ES-5

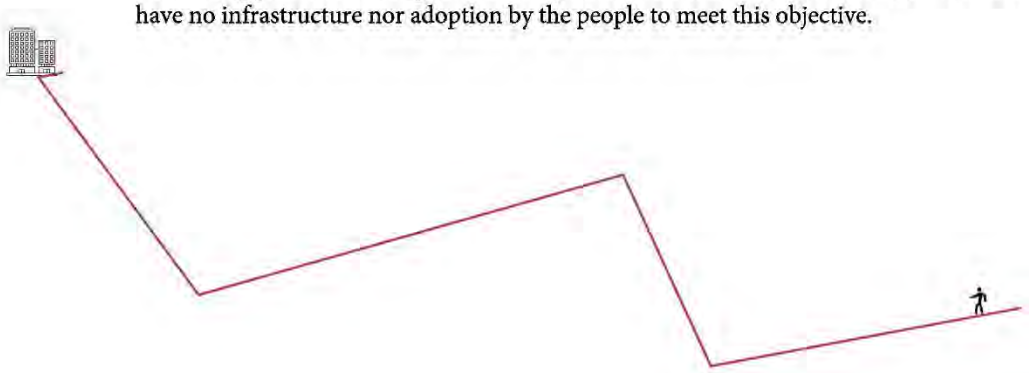
Comments on ES.3.2, page ES-6 #6, (next page)

- This statement is not reality and a long shot to be achieved. Putting the cart before the horse. Standards used, and data collected are not representative of reality as will be noted in appropriate sections.

- Problem with Executive Summary is that it seems to be based more in wishful thinking and finding data or a study to support it. **Why was there no study done of current residents in the area (lots of apartments, condo and single family homes could have been polled) related to Transit use and if they currently walk to the Metro or Downtown El Segundo?** The underpinnings of it depend completely on something that has never been proven to work in Los Angeles nor this area. Those things are:

    - Well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong, I wish it would work but it just has not. If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. But we are putting the cart before the horse.
    - "Downtown is walkable distance." **It is not.** I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit **as consistent with El Segundo standard**. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.

I21-45 Cont.



4. Enhance bicycle and vehicular circulation through roadway intersection improvements that facilitate a safe and walkable community along Pacific Coast Highway.
5. Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.
6. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

I21-45 Cont.

ES.4 Summary of Environmental Impacts and Mitigation Measures

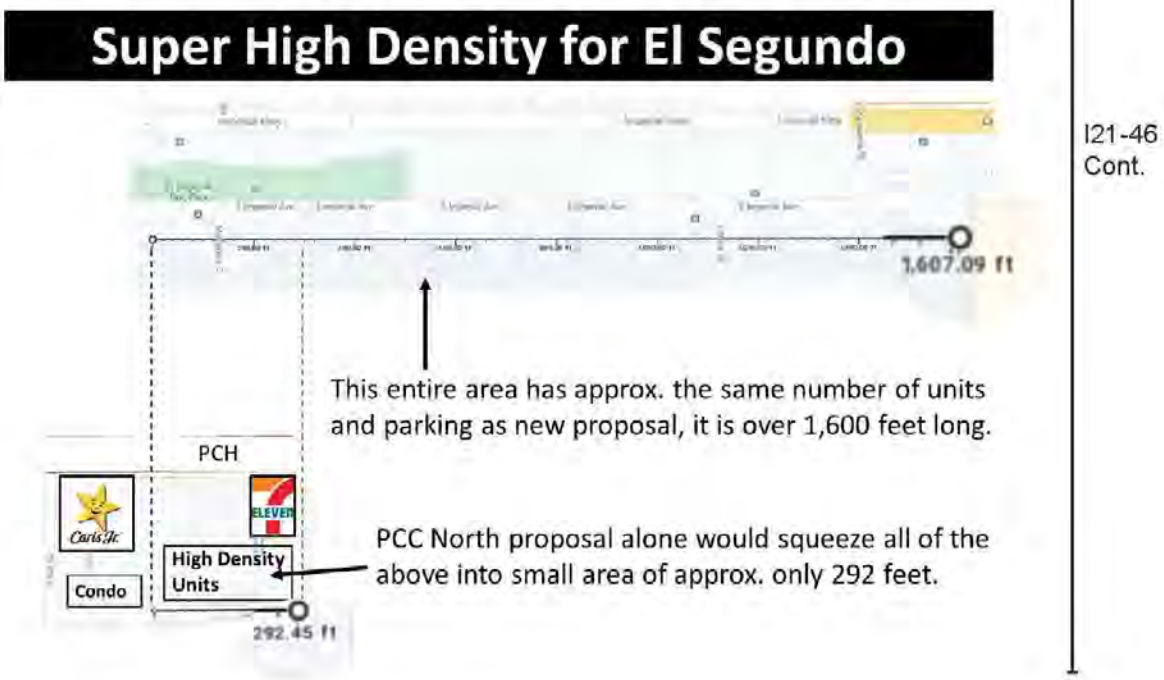
I21-46

Table ES-1, Summary of Environmental Impacts and Mitigation Measures, provides a summary of the impact analysis related to the Project. Table ES-1 identifies a summary of the significant environmental impacts resulting from the Project pursuant to State CEQA Guidelines Section 15123(b)(1). For more detailed discussion, please see Chapter 4 of this Draft EIR. Table ES-1 lists the applicable mitigation measures related to potentially significant impacts, as well as the level of significance after mitigation.

Comments on: Table ES-1 Summary of Impacts Noise section, page ES-20 (next page)

- There will be a permanent increase in Noise
  - Human activity/population growth/high density
  - Traffic noise on surrounding streets and Mariposa all the way to downtown.
  - LAX noise propagation off of a 6 story building not addressed
  - Again if this was built south of Grand or east of Sepulveda this would not impact the current residential population. The 2 ways to get into the Downtown area of El Segundo quickly, efficiently and with little to no impact to any resident in El Segundo is El Segundo Blvd and Imperial Hwy. If built south of Grand, using El Segundo Blvd does not impact any residents.

I21-46
Cont.



Proponents of project will say that the noise is attenuated here due to distance, and that it's not within the 65 dBA noise contour. These both may be true, however noise does propagate and echo off of walls as well, it's just as much of a physical property as attenuation. So we cannot deny that this will send more airport noise into the community, its just a matter of physics.

I21-47

LAX noise will be amplified by PCC echoing all of that noise due to its height. It will echo off exterior walls just as Pacific Corporate Towers, Boeing building, etc. currently do in the area on Sepulveda between Imperial and El Segundo Blvd. All of that additional noise pollution will be channeled back into the City of El Segundo.
This perplexes me as El Segundo has proudly held back the expansion and noise of LAX (plaque on mortuary hill commemorating it). El Segundo has forced LAX to modify its operations to mitigate noise and I, as an Airport Superintendent with the LAX airport authority know this first hand. We have numerous restrictions imposed and complied with.

I21-47 Cont.

El Segundo as a City participates in the regular LAX noise meetings. One of the responsibilities of LAX adjacent cities is to basically plan your City to mitigate Noise. I see a mixed message here. El Segundo will build tall buildings that bounce airport noise back into the City but then vehemently reject the idea of LAX expanding and making more noise. Please see the FAA Noise Abatement Policy below:

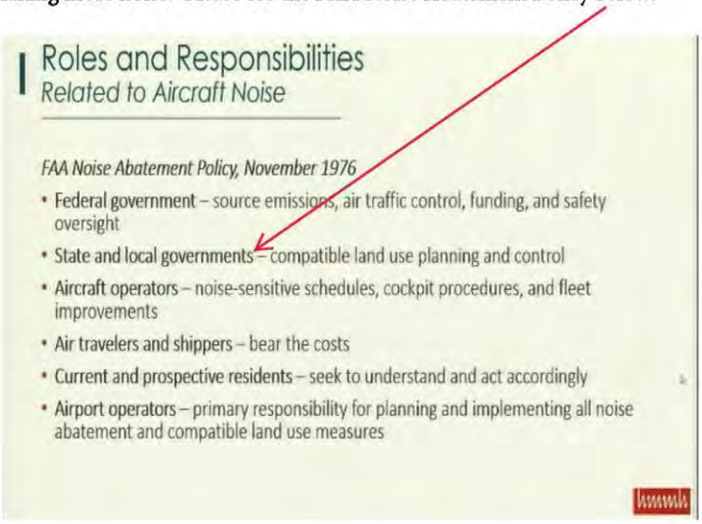


Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Land Use and Planning			
Would the project physically divide an established community?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on land use resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Noise			
Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Potentially Significant Impact	MM-NOI-1: Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures: a. To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating	Less Than Significant

I21-48 Cont.

Table ES-1 Summary of Impacts Population and Housing section page ES-23 (next page)

- Obviously this is an impact and substantial. We have never had high density apartments like this. This is, by the word itself "high density", impactful to a community and region that has never had this type of development, as opposed to a community that has numerous high density housing. So this is a monumental shift in how to look at housing, so if ever there would be a time to call something impactful it would be now. The first time we try something drastically new it is impactful for better or worse. **Our infrastructure to support this drastic change is not there yet, nor is the population in large part given up vehicles.** Again cart before the horse.

I21-48

Table ES-1. Summary of Project Impacts

Environmental Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Population and Housing			
Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project have a cumulative effect on housing and/or population resources?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Public Services and Recreation			
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:			
Fire protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable

I21-48 Cont.

Table ES-1 Summary of Impacts, Parks misc section page ES-24 (next page)

- In this section it asks if Parks will be impacted and the summary says "no". There are literally parks about 100' away ALL ALONG THE PROPOSED DEVELOPMENT SITE!
- Freedom Park, Washington Park, Constitution Park are all literally a stone's throw from the site. Unless the term Park is redefined for this study. I pay extra property taxes because I live next to these parks. El Segundo Parks and Rec upkeep them, as I see them all the time and they are utilized like any other park by the normal definition. This really needs some explanation.
- Bypass and shortcut traffic (detailed in Transportation analysis) would impact these parks and potentially be a safety hazard

I21-49

Table ES-1. Summary of Project Impacts

Environment(s) Topic	Impact?	Mitigation Measure(s)	Level of Significance After Mitigation
Police protection?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Schools?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Parks?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Other public facilities?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Less than Significant Impact	No mitigation measures are required.	Not Applicable
Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	Less than Significant Impact	No mitigation measures are required.	Not Applicable

I21-49 Cont.

(P). According to the City's General Plan, the General Commercial designation permits all retail uses, including hotel uses, and major medical facilities, at a maximum floor area ratio (FAR) of 1.0. Office uses are not permitted except for those providing personal services not exceeding 5,000 square feet such as travel and insurance agents (City of El Segundo 1992). The City's General Plan parking designation permits areas for parking automobiles, motorcycles, and bicycles in surface or structured parking (City of El Segundo 1992). While hotel uses are allowed in the existing General Commercial (C-3) Zone, and the Fairfield Inn and Suites and the Aloft Hotels both have existing Conditional Use Permits, the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. The Aloft Hotel is 98,741 net square feet in size with an existing 0.992 FAR based upon its current lot size and configuration where a maximum of 1.0 FAR is allowed. The three buildings that comprise the Fairfield Inn and Suites Hotel total 190,026 net square feet in size with an existing 1.94 FAR where 1.0 FAR is allowed (existing legal, non-conforming condition). Both properties are non-conforming in regard to many development standards as they were built prior to the current development standards of the General Commercial (C-3) Zone. Further, no further intensification of the land uses could occur with the current FAR standards. Therefore, the continuation of the City's General Plan would not allow for additional development to occur.

Section 15126.6(e)(3)(B) further states that "in certain instances, the no project alternative means 'no build' wherein the existing environmental setting is maintained." Accordingly, Alternative A assumes the proposed Project would not proceed, no new permanent development or land uses would be introduced within the Project site, and the existing environment would be maintained. The existing uses would continue to operate as they do currently. The existing hotel uses would remain in place and operational, the existing surface parking lots would be retained, no new buildings or parking garages would be constructed, no on-site landscaping improvements would occur, and no intersection improvements would occur.

E.S.5.2 Alternative B - Reduced Development Alternative: Exclusion of PCC–North

CEQA requires that EIRs "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" (14 CCR 15126[a]). As presented in prior sections of this EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the applicable Air Quality Management Plan (AQMP). As such, Alternative B proposes a reduction in the Project to eliminate the significant impacts related to population growth projections and the AQMP, as well as lessen the proposed development intensity by eliminating PCC-North from the Specific Plan boundaries.

I21-50

As previously discussed in Section 4.11, Population and Housing, the Southern California Association of Government's (SCAG) forecasted population growth for the City of El Segundo is 500 persons between 2016 and 2045. Assuming 2.35 persons per household, the proposed Project's 263 residential units would accommodate 618 individuals at full occupancy of all units. If these 618 individuals would be new residents to the City, then the proposed Project would exceed SCAG's estimated projections through 2045 by 118 persons. Alternative B would not exceed SCAG's estimated projection through 2045.

As previously described in Section 4.2, Air Quality, considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a

This would be a viable alternative. I still don't believe some of the objectives are met but it lessens the overall impact to the community.

Environmental Setting, none of the anticipated cumulative projects are in close enough proximity to the Project site. At a distance of over 1,000 feet, aggregate noise emission levels from the nearest cumulative project to the southeast on Grand Avenue would attenuate due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography). Hence, noise due to construction of other projects would not meaningfully combine with future development under the Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to a studied noise-sensitive receptor is compliant with the aforementioned City threshold for construction noise as received by a residential property, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities; or,
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dB change).

Additionally, all future development under implementation of the Project, as well as unrelated construction projects within City limits, would be required to comply with limits on allowable construction hours per relevant **portions of the City's noise ordinance. Hence, for the above reasons, cumulative impacts due to cumulative** construction noise would be less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold 4.10.4(b) above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2025 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would generate a noise level increase of less than 3 dBA along the studied sample roadways in the vicinity of the Project. As such, anticipated increases would be below the significance threshold of 3 dBA; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life even if the traffic was silent.

I21-51

Noise Review

I21-52

pressure levels can also be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects when distances between a source and receptor are large.

- **Shielding by Natural or Human-Made Features** – A large object or barrier in the direct path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and ridgelines) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receptor specifically to reduce noise. A barrier that breaks the line of sight between a source and a receptor will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. While a line of trees may visually occlude the direct line between a source and a receptor, its actual noise-reducing effect is usually negligible because it does not create an acoustically solid barrier. Deep expanses of dense wooded areas, on the other hand, can offer noise reduction under the right conditions.

Vibration Characteristics

Vibration is oscillatory movement of mass (typically a solid) over time. It is described in terms of frequency and amplitude and, unlike sound, can be expressed as displacement, velocity, or acceleration. For environmental studies, vibration is often studied as a velocity that, akin to the discussion of sound pressure levels, can also be expressed in dB as a way to cast a large range of quantities into a more convenient scale. Vibration impacts to buildings are generally discussed in terms of inches per second (ips) peak particle velocity (PPV), which will be used herein to discuss vibration levels for ease of reading and comparison with relevant standards. Vibration can also be annoying and thereby impact occupants of structures, and vibration of sufficient amplitude can disrupt sensitive equipment and processes (Caltrans 2013b), such as those involving the use of electron microscopes and lithography equipment. Common sources of vibration within communities include construction activities and railroads. Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack hammering, and demolition-related activities where sudden releases of subterranean energy or powerful impacts of tools on hard materials occur. Depending on their distances to a sensitive receptor, operation of large bulldozers, graders, loaded dump trucks, or other heavy construction equipment and vehicles on a construction site also have the potential to cause high vibration amplitudes. The maximum vibration level standard used by Caltrans for the prevention of structural damage to typical residential buildings is 0.3 ips PPV (Caltrans 2013b). For human annoyance, Caltrans guidance indicates that a more **stringent threshold of 0.2 ips PPV due to continuous vibration (e.g., nearby roadway traffic) would be "annoying."** Vibration velocity limits for transient or single events tend to be less stringent than those for continuous or **"steady-state" vibration sources.**

Sensitive Receptors

Single family homes were a glaring omission in this category. Certainly the increased human activity in general, in the parks, via traffic and parking. Single family homes are threatened by unwanted noise that has significant potential not to just tick up, but spike up.

I21-52 Cont.

Noise- and vibration-sensitive land uses are typically considered locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, and hospitals are usual examples, with others depending on what the local jurisdiction may have defined or established. Based on context from the City Noise Ordinance and General Plan Noise Element as summarized in Section 4.10.2, Relevant Plans, Policies, and Ordinances, sensitive receptors include multi-family homes located immediately to the west and northwest of the Project site. These existing sensitive receptors represent the nearest land uses with the potential to be impacted by construction and operation of future projects under the Project, including noise

See next page "Existing Noise Environment" page 4.10-6:

Comment: the predictive modeling does not take into account whatsoever Mariposa traffic and all the shortcut traffic through residential streets and resulting ambient noise. If the project is so confident there will be no traffic in these areas, then the City should have no qualms about turning them into cul de sacs or some other traffic deterrent method to guarantee no new residents are using shortcuts. Also, only predictive modeling was done with no field verification. Also, as an engineer myself someone should be thinking beyond the small foot print of 100' from project boundary that is extremely tight. At minimum, the scope should have been expanded for reasonably foreseeable traffic and noise impacts, which was not done. As the study indicates they could not collect data due to suppressed traffic and noise from COVID19, so admitting we do not have conclusive nor expanded scope data to back any of this up. This is a big risk. Therefore more weight should be put on local residents in the immediate area for data. Was Traffic and Noise modeled down Mariposa and back streets?

I21-53

Single family homes seem to be completely ignored. This is not only insulting but grossly incorrect. Traffic and parking will add to noise (is there a lifetime guarantee that no hotel nor PCC resident nor guest are going to park in the single family neighborhood or any surrounding street?, domino effect of parking issues now and in the near future are a reasonable concern, look no further than apartments along Imperial, they come with parking garages, are **LOW** density and still spill over into the streets

I21-53 Cont.

levels associated with the addition of Project-related traffic on the local roadway network. Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors. In addition to the off-site receptors listed above, the proposed residential uses to be constructed and occupied as part of the Project would be considered sensitive receptors after completion of construction and occupancy.

Existing Noise Environment

The existing noise environment of the Project area and its vicinity includes a variety of acoustical contributors that include aviation traffic from Los Angeles International Airport (LAX), proximate roadway traffic on PCH and the connected network of local streets, and an assortment of stationary noise sources that include commercial and industrial activities as well as operating heating, ventilating, and air-conditioning systems (HVAC) from residential and commercial land uses.

For purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique that is based on proximity of roadway traffic, which in this case PCH would be the expected dominant acoustical contributor. Under normal conditions, such estimates of the outdoor ambient sound levels would be confirmed with or supplanted by field-collected SPL measurements. However, at the time of this writing and due to COVID-19 response effects, commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Traffic noise levels representing existing (i.e., baseline or pre-Project) conditions were modeled with the FHWA Traffic Noise Model (TNM, Version 2.5) at representative noise-sensitive receivers ST1 through ST6 (see Figure 4.10-1, Traffic Noise Analysis). Details of the TNM inputs and output appear in Appendix H-2. These six receivers were modeled to be 5 feet above the local ground elevation. The traffic noise model prediction results have CNEL values ranging from 55 to 69 dBA. The predicted CNEL values for existing pre-Project conditions at sample receivers representing those nearest to PCH (ST3 and ST6) are each comparable to traffic-dominated outdoor ambient sound levels as estimated by Federal Transit Administration (FTA) guidance (i.e., Table 5-7 from the Transit Noise and Vibration Impact Assessment [FTA 2006]) and based on proximity to major roadways such as PCH. This correlation, with quantified differences no greater than 3 dB (a barely perceptible difference), between the modeled results and estimates from FTA guidance suggests the same TNM-based model can be used to predict the outdoor ambient levels for other surrounding roadways proximate to the Project and thereby evaluate **future "existing + project" traffic noise levels.**

The predicted pre-Project traffic sound levels are also generally consistent with what is depicted in Exhibit N-1 **from the City's General Plan Noise Element, which illustrates "existing CNEL noise contours" and suggests that**, due to the proximity of LAX, Interstate 105, and PCH, the CNEL for the neighborhood surrounding the Project would at least range from 60–65 dBA CNEL (City of El Segundo 1992a). Predicted existing traffic noise levels that are lower, such as 55 dBA CNEL at ST2, represent the modeled effect of existing buildings (i.e., the Fairfield Inn and Suites Hotel) occluding the sound emission from PCH. Where predicted levels are higher, such as 69.5 dBA CNEL at ST3 and ST6, the positions are merely closer to PCH and fully exposed to its acoustical contribution.

- Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH

I21-53 Cont.

guideline for compliance with California Noise Insulation Standards (City of El Segundo 1992a). As stated in Government Code Section 65302(f), the ultimate purpose of noise control policies and programs is to "minimize **the exposure of community residents to excessive noise."**

Goal N1: Provision of a Noise-Safe Environment. Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise.

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Noise will permeate well beyond the boundary of site footprint due to human activity, park activity, traffic and potential parking problems down Mariposa and short cut streets to access PCH

I21-53 Cont.

dBA or higher shall include all mitigation measures necessary to reduce interior noise levels to minimum state standards. Post construction acoustical analysis shall be performed to demonstrate compliance.

Objective N1-2: It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1: Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A: Address noise impacts in all environmental documents for discretionary approval projects, to insure that noise sources meet City Noise Ordinance standards. These sources may include: mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

Program N1-2.1B: The City shall establish criteria for determining the type and size of projects that should submit a construction-related noise mitigation plan. Noise mitigation plans shall be submitted to the City Engineer for his review and approval prior to issuance of a grading permit. The plan must display the location of construction equipment and how this noise will be mitigated. These mitigation measures may involve noise suppression equipment and/or the use of temporary barriers.

Program N1-2.1C: The City shall strictly enforce the El Segundo Municipal Code's time-dependent noise standards for stationary sources. Two of the major sources which shall be closely monitored are industrial facilities and construction activities.

Policy N1-3.1: Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Program N1-3.3A: The City shall review and, if necessary, revise the City Noise Ordinance to ensure that proper regulations are being enforced to protect City residents from excessive noise levels from stationary noise sources.

I21-54

this fails because of the potential for future repeal of mandatory pay for garage parking therefore pushing even more cars outside besides the overflow (I know the study says there will be an excess supply but I will comment on this more in the Parking section)

A.5.b. Loading docks, bays and parking spaces, delivery service areas, outdoor storage areas, stand-alone mechanical equipment facilities, should be located and designed to minimize their visibility, circulation conflicts and adverse noise impacts. Sound attenuation walls should be used where appropriate to **reduce noise where required by code or the Project's environmental analysis.**

A.5.e. Trash and recycling receptacles areas should be completely screened from public view from public rights-of-way with solid walls, wood, and/or landscaping.

4.10.3 Thresholds of Significance

The significance criteria used to evaluate a project's impacts related to noise are based on Appendix G of the CEQA Guidelines. According to Appendix G of the CEQA Guidelines, a significant impact related to noise would occur if a project would result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b) Generation of excessive groundborne vibration or groundborne noise levels.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

Quantitative thresholds of significance have been established for the purposes of this analysis based on the local polices and regulations described in Section 4.10.2 and are listed below.

- Through adherence to the limitation of allowable construction times provided in the El Segundo Municipal Code (ESMC), construction-related noise levels attributed to the Project of less than 65 dBA (or as adjusted upwards for partial-hour activity durations) at residential property lines would be considered compliant with the ESMC and would result in less than significant impacts. The property lines of the nearest multi-family residences to the west of the Project appear to be as close as 15 feet to the PCC-North, 58 feet to the PCC-Fairfield Parking, and 62 feet to the PCC-South.
- Off-site noise impacts due to Project-generated traffic would be considered significant if Project-generated traffic causes an increase of 3 dBA CNEL (a barely perceptible difference) compared to existing traffic noise levels.
- Noise emission from Project-attributed stationary sources, such as rooftop HVAC systems operating at night to provide interior comfort for new residential and non-residential land uses implemented as a result of the Project, would be limited to a 5 dBA increase over the ambient levels at the nearest off-site existing residential properties.
- Noise emission from Project-attributed stationary sources, such as rooftop HVAC systems operating at night to provide interior comfort for new residential and non-residential land uses implemented as a result of the Project, would be limited to an 8 dBA increase over the ambient levels at the nearest off-site existing commercial properties.
- Guidance from Caltrans indicates that a vibration velocity level of 0.2 ips PPV received at a structure would be considered annoying by occupants within (Caltrans 2013b). As for the receiving structure itself, aforementioned Caltrans guidance from Section 4.10.2 recommends that a vibration level of 0.3 ips PPV would represent the threshold for building damage risk.

In the future transiting vehicles in and out of garage and garage itself will have significant impact on Illinois Ct

I21-55

Table 4.10-5. Predicted Construction Noise Levels per Activity Phase

Construction Phase (and Equipment Types Involved)	Hourly L_{eq} at Nearest Noise-Sensitive Receptor to *Construction Site Boundary* (dBA)	Hourly L_{eq} at Nearest Noise-Sensitive Receptor to *Acoustical Centroid of Site* (dBA)
Architectural Coating (Air Compressor)	73	63
Paving (Paver, Concrete Mixer Truck, Roller)	77	71
Buildout Phase 2 (PCC-North)*		
Demolition (Concrete Saw, Excavator, Dozer)	84	N/A
Site Preparation (Dozer, Backhoe, Front End Loader)	82	N/A
Grading (Excavator, Grader, Dozer, Backhoe)	85	N/A
Construction (Crane, Manlift, Generator, Backhoe, Welder)	78	N/A
Architectural Coating (Air Compressor)	78	N/A
Paving (Paver, Concrete Mixer Truck, Roller)	81	N/A
Buildout Phase 3 (PCC- South)		
Demolition (Concrete Saw, Excavator, Dozer)	71	74
Site Preparation (Dozer, Backhoe, Front End Loader)	76	74
Grading (Excavator, Grader, Dozer, Backhoe)	77	74
Construction (Crane, Manlift, Generator, Backhoe, Welder)	72	70
Architectural Coating (Air Compressor)	72	63
Paving (Paver, Concrete Mixer Truck, Roller)	77	71

* For Phase 2, the nearest receptors are multi-family residential buildings west of the Project property line at PCC North, at which **the construction noise level needs to be assessed and compared with the City's 65 dBA threshold**

N/A = not applicable (since operating construction equipment would largely be near the construction site boundary for a considerable portion of Phase 2 construction).

As presented in Table 4.10-5, the estimated construction noise levels are predicted to be as high as 85 dBA hourly L_{eq} at the nearest existing residences when Project Buildout Phase 2 (PCC-North) grading activities take place. Aside from operation of an air compressor at the acoustical center of buildout Phases 1 and 3, noise from **construction for all phases is anticipated to exceed the City's hourly threshold of 65 dBA** L_{eq} at the existing nearest residential properties to the west. Thus, under these conditions construction noise would result in a temporary but significant noise impact at these receptors and require mitigation measures that—if designed and implemented properly by the Project applicant and its construction contractors—would need to demonstrate at least 5 dBA and as high as 20 dBA of sound abatement in order to yield Project-attributed construction noise levels that are compliant with this City standard. **Typical construction "sound blankets", such as those offered by** local suppliers, are capable of providing this 5 to 20 dBA range of acoustical insertion loss (i.e., the difference in measured sound level at a receiver after a sound-occluding element is placed in the direct path between the receiver and the noise source of interest). Thus, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level.

Table 4.10-6 illustrates the existing noise levels (2019) at the noise locations, and the anticipated post-Project noise levels. As previously discussed, for purposes of this noise impact assessment, the existing outdoor ambient noise environment is estimated with an FHWA predictive modeling technique that is based on proximity of roadway traffic, which in this case PCH would be the expected dominant acoustical contributor. Under normal conditions, such estimates of the outdoor ambient sound levels would be confirmed with or supplanted by field-collected SPL measurements. However, at the time of this writing and due to COVID-19 response effects,

I21-56

Noise levels not reliable since down during the Pandemic as stated. Traffic and noise from vehicles and aircraft down 85%

commercial activities and levels of roadway and aviation traffic have likely been reduced in volume or intensity, and would therefore result in measured outdoor ambient sound levels that are lower and consequently unrepresentative of the typical sound environment under normal conditions.

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

This is only predictive, no field data to back it

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (West of Indiana Street)	59.0	56.1	59.5	55.5	-4.0
ST2 (Northwestern Project Boundary)	55.0	55.9	55.2	55.7	0.9
ST3 (Eastern Project Boundary Approximately 50 Feet from PCH)	69.5	68.2	70.3	68.7	1.6
ST4 (Northeast Corner of E Mariposa Avenue and Illinois Court)	63.0	62.7	63.3	62.9	-0.4
ST5 (Norther Project Boundary approximately 30 feet from E Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6 (Eastern Project Boundary approximately 50 feet from PCH)	69.5	69.6	70.2	70.2	0.1

dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

I21-56 Cont.

Scope of these too tight, does not address neighboring areas

Table 4.10-6 shows ve receivers, the addition of proposed Project traffic to the roadway network would result in a CNEL value increase of less than 3 dB, which is below the discernible level of change for the average healthy human ear. In fact, the installation of the proposed Project would add sound-path occlusion and result in predicted SPL that are lower than existing measured levels. Thus, a less-than-significant impact would occur for Project-related off-site traffic noise affecting existing residences in the vicinity.

Traffic Noise Exposure to Future Project Occupants

Aside from exposure to aviation traffic noise, current CEQA noise-related guidelines do not require an assessment of exterior-to-interior noise intrusion, environmental noise exposure to occupants of newly created Project residences, or environmental noise exposure to exterior non-residential uses attributed to the development of the proposed Project. Nevertheless, the California Building Code requires that interior background noise levels not exceed a CNEL of 45 dB within habitable rooms. Hence, the following predictive analysis of traffic noise exposure at the exteriors of occupied residences and outdoor living areas is provided for informational purposes. Additionally, this analysis of outdoor environmental noise to the newly created Project residences would be consistent with **the "post-construction acoustical analysis" per Program N1-1.9A from the City's General Plan** Noise Element.

In addition to the prediction results presented in Table 4.10-6, the FHWA TNM software was also used to predict the future plus Project scenario traffic noise levels at multiple on-site exterior areas, as listed in Table 4.10-7. At

Environmental Setting, none of the anticipated cumulative projects are in close enough proximity to the Project site. At a distance of over 1,000 feet, aggregate noise emission levels from the nearest cumulative project to the southeast on Grand Avenue would attenuate due to the decrease in noise levels with distance and the presence of physical barriers (i.e., intervening buildings and topography). Hence, noise due to construction of other projects would not meaningfully combine with future development under the Project to produce a cumulative noise effect during construction. By way of illustration, if there are two concurrent construction projects of comparable sound emission intensity, and the activity nearest to a studied noise-sensitive receptor is compliant with the aforementioned City threshold for construction noise as received by a residential property, the other activity could be no closer than three times the distance of the receptor to the nearest activity and not make a cumulatively measurable contribution to the total noise exposure level. If two concurrent projects were close to a receptor, the cumulative noise would be one of the following:

- The louder (in dBA) of the two concurrent activities; or,
- A logarithmic sum of the two activity noise levels that, per acoustic principles, cannot be more than 3 dBA greater than the louder of the two individual noise-producing activities.

In sum, cumulative construction noise is likely to be dominated by the closest or loudest activity to the receptor, and the combination will be no more than a barely perceptible difference (i.e., up to a 3 dB change).

Additionally, all future development under implementation of the Project, as well as unrelated construction projects within City limits, would be required to comply with limits on allowable construction hours per relevant **portions of the City's noise ordinance. Hence, for the above reasons, cumulative impacts due to cumulative** construction noise would be less than significant.

Vibration

Construction-related vibration from future development under the Project was addressed under Threshold 4.10.4(b) above. Other foreseeable projects within the vicinity of the Project site would not be close enough to create a combined excessive generation of groundborne vibration; therefore, cumulative impacts associated with excessive groundborne vibration would be less than significant.

Permanent Increase in Ambient Noise Levels

Off-Site Traffic

Future development from implementation of the Project along with other unrelated projects would generate off-site traffic noise. When calculating future traffic impacts, the traffic study included traffic attributed to both the Project and unrelated projects. Thus, future traffic noise prediction results with and without the Project already account for the cumulative impacts from unrelated projects contributing to traffic increases. Since the noise impacts are generated directly from the traffic analysis results, the Existing and Year 2025 traffic with and without Project predicted increases in traffic noise levels described herein already reflect cumulative impacts. As described herein, the noise level increases associated with both of these scenarios would generate a noise level increase of less than 3 dBA along the studied sample roadways in the vicinity of the Project. As such, anticipated increases would be below the significance threshold of 3 dBA; hence, the incremental effect of the Project on off-site traffic noise is not cumulatively considerable. Cumulative off-site traffic noise impacts would be less than significant.

Disagree, considerable increase of shortcut traffic on neighboring streets and Mariposa traffic noise. Will lower property values and quality of life even if the traffic was silent.

I21-57

Transportation Review

I21-58

Freeways

I-105 runs in an east/west direction north of the Project site and extends from Los Angeles International Airport to Norwalk. In the vicinity of the study area, I-105 provides three to four lanes in each direction. Interchanges are provided at Nash Street and PCH in the study area. I-105 connects to I-405 approximately 1.5 miles from the Project site.

I-405 runs in a north/south direction east of the Project site and extends from the San Fernando Valley to Irvine. In the vicinity of the of the study area, I-405 provides four travel lanes and a carpool lane in each direction (a total of 10 lanes). Interchanges are provided via the I-105 and at El Segundo Boulevard in the study area.

East/West Streets

Shortcut traffic will increase

- **Imperial Highway** is classified as a secondary arterial in the study area and runs north of the Project site. It provides three lanes in both directions with a raised median in the study area. Parking is not permitted along either side of the street in the study area.

Shortcut traffic will increase significantly

- **Walnut Avenue** is classified as a local commercial street west of PCH and secondary arterial east of PCH in the study area. It runs north of the Project site and provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Maple Avenue** is classified as a local residential street west of PCH and 4-lane collector east of PCH in the study area. It runs north of the Project site and provides one lane in both directions west of PCH and two lanes in both directions east of PCH in the study area. Parking is permitted along either side of the street in the study area.

Traffic in general will increase significantly

- **Palm Avenue** is classified as a local commercial street in the study area and runs north of the Project site. It provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Mariposa Avenue** is classified as a two-lane collector west of PCH and a secondary arterial east of PCH in the study area and runs between the Pacific Coast Commons – North (PCC-North) and Pacific Coast Commons – Fairfield Parking (PCC-Fairfield Parking) Project sites. It provides one lane in both directions west of PCH and two lanes in both directions east of PCH in the study area. Parking is permitted along either side of the street in the study area.
- **Holly Avenue** is classified as a local commercial/residential street in the study area and runs south of the Project site. It provides one lane in both directions in the study area. Parking is permitted along either side of the street in the study area.
- **Grand Avenue** is classified as a secondary arterial in the study area and runs south of the Project site. It provides three lanes in both directions between PCH and Nash Street. Grand Avenue is constructed with two lanes in both directions west of PCH. Parking is not permitted along either side of the street in the study area east of PCH, however there are time restricted parking zones along some portions of Grand Avenue west of PCH.
- **El Segundo Boulevard** is classified as a secondary arterial west of PCH and major arterial east of PCH in the study area. It runs south of the Project site and provides two lanes in both directions west of PCH and three lanes in both directions with a raised median east of PCH in the study area. Parking is not permitted along either side of the street in the study area.

I21-58 Cont.

North/South Streets

- **Kansas Street** is classified as a local residential street in the study area that runs west of the Project site and provides one lane in both directions. Parking is permitted along either side of the street in the study area.
- **Indiana Street** is classified as a local commercial/residential street that fronts the western side of the Project site. It provides one lane in each direction with parking permitted on both sides of the street in the study area.
- **PCH** also known as State Route 1, is a major north/south state highway that runs along most of the Pacific coastline of California. It fronts the eastern side of the Project site and provides four lanes in both directions with a center median within the study area. Parking is not permitted along either side of the road in the study area. Previously in the City, this major arterial was referred to as **Sepulveda Boulevard**.
- **Lairport Street** is classified as a secondary arterial in the study area and runs east of the Project site. It provides one lane in both directions. Parking is permitted along either side of the street in the study area. Lairport Street becomes Continental Boulevard south of Mariposa Avenue.
- **Continental Boulevard** is classified as a secondary arterial in the study area and runs east of the Project site. It provides three lanes in both directions. Parking is not permitted along either side of the street in the study area. Continental Boulevard becomes Lairport Street north of Mariposa Avenue.
- **Nash Street** is classified as a secondary arterial in the study area and runs east of the Project site. It provides two lanes in both directions. Parking is not permitted along either side of the street in the study area.

I21-58 Cont.

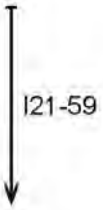
** Washington St not even mentioned and it will receive a significant amount of bypass and shortcut traffic. The addition of one more lane at PCH/Mariposa will not make enough of a dent in traffic to prevent this, plus the estimate of new vehicles in circulation is way underestimated.

The Project site is served by public transit. Figure 4.13-2, Transit Routes, shows the various bus routes and Metro C Line that provide service in the study area. The Project site is located west of the Metro C Line Mariposa Station. The following bus routes are within the study area: two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two Los Angeles Department of Transportation (LADOT) Commuter Express (Route 438, 574) routes.

Details on the transit lines in the vicinity of the Project site are as follows:

- Metro C (formerly Green) Line – The C Line is a light rail line running between Redondo Beach and Norwalk in Los Angeles County. This line runs north/south east of the Project site along Nash Street. The C Line has average headways of 10 minutes during the weekday AM and PM peak periods. The C Line Mariposa Station is just over 0.5 miles from the Project site.
- Metro Line 232 – Line 232 provides local service between the City and downtown Long Beach. It runs along PCH east of the Project site in the study area. Line 232 has average headways of 20 minutes during the weekday AM peak period and 30 minutes during the weekday PM peak period.
- Metro Line 625 – Line 625 provides local service between the City and Los Angeles International Airport. It runs along Imperial Highway, north of the Project site in the study area. Line 625 has average headways of 25 minutes during the weekday AM peak period and 30 minutes during the weekday PM peak period.
- Beach Cities Line 109 – Line 109 provides local service between the City of Redondo Beach and Los Angeles International Airport. This line runs along east of the Project site along PCH. Headways average 30 to 45 minutes during peak periods.
- LADOT Commuter Express 438 – Line 438 provides express service from El Segundo to Downtown Los Angeles along Imperial Highway, north of the Project site. Line 438 has headways of 15 to 30 minutes during weekday AM and PM peak periods.

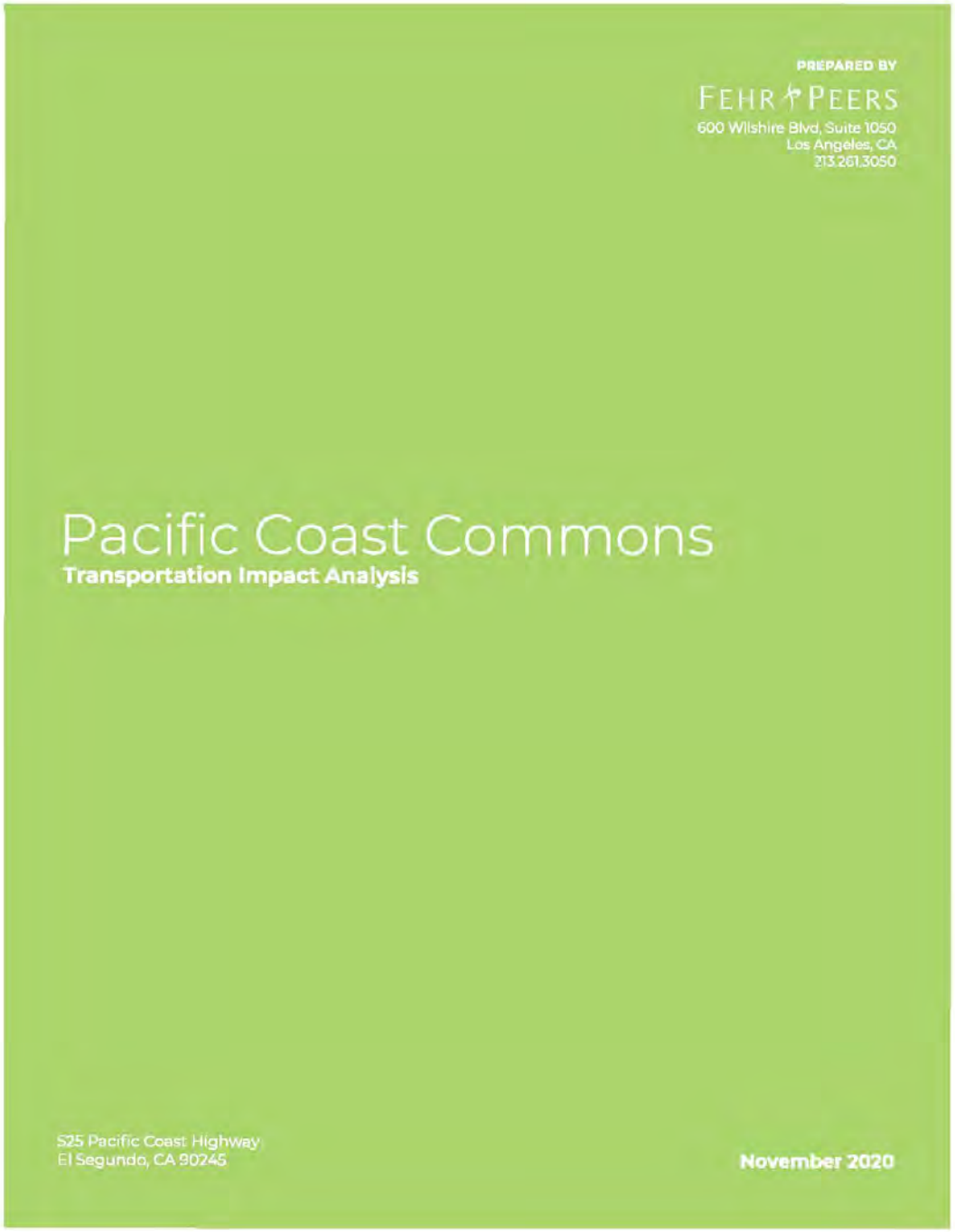
Transportation Impact Review



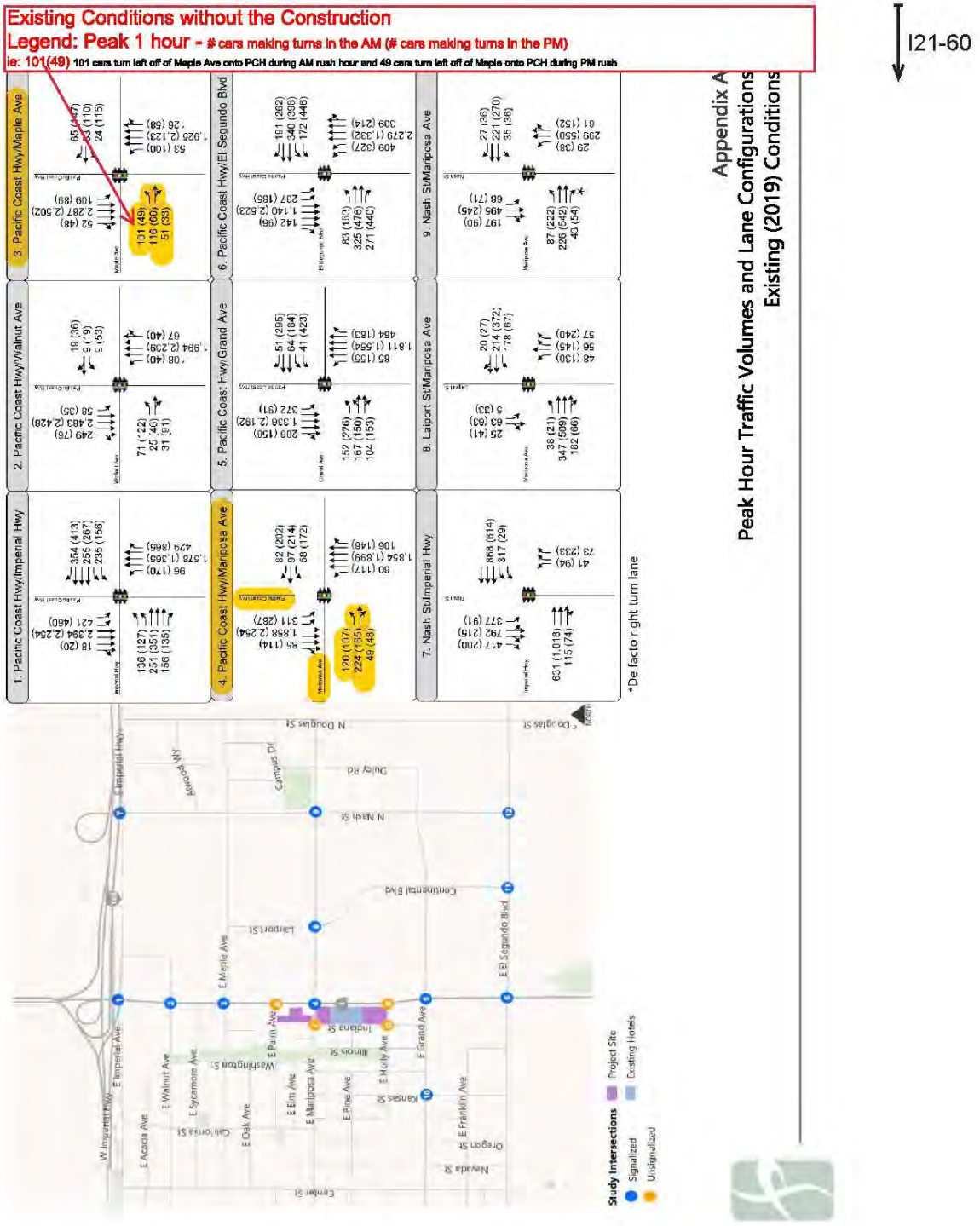
Transportation Impact Analysis Summary

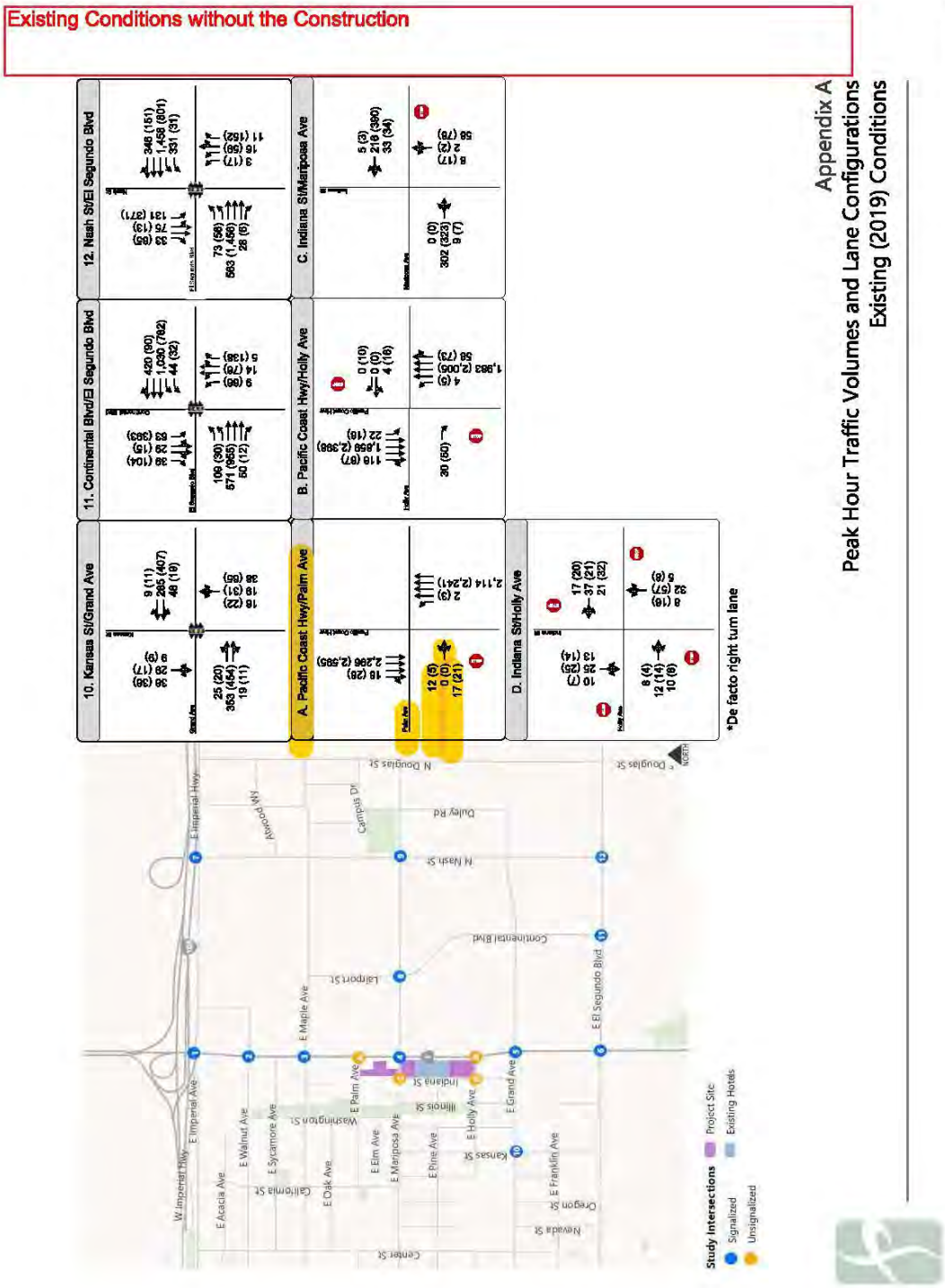
- The Analysis conducted for the EIR was based on the number of additional vehicles the project would bring. This number comes from the Parking Analysis. As I have shown in that respective area and others, the standards used and data collection is not representative of what we currently have going on. 2 big underlying assumptions used in the EIR is that many people are going to forgo vehicles and walk to transit and walk to Downtown El Segundo
  - **Big question**: Why was there no study completed to even ask or analyze whether the current population of apartments, condos and single family homes in the immediate area do any of this??
  - It seems like a logical step to take if this is one of your Project objectives and basis for making a judgment on a Project, especially if it could be impactful to the neighborhood and city.
  - I live in the immediate area and have never seen even a trickle of people walking to Transit or Downtown. Only walkers are for exercise.
- Standards used as basis are not representative (should simply used realistic standard set forth by the City of El Segundo 2 cars per unit. Also the data sampling is suspect and not representative of the immediate surrounding area.
- Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that but we're putting the cart before the horse.
- We need a culture or cost of vehicle ownership of fewer cars before housing ideas capitalize on that.
  - If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.
  - We do not have well established and mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first and then housing will follow. Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it?
  - The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well established historical average of 2 cars/unit.
- "Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever how do we think they are going to walk downtown or to transit. LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it but we have no infrastructure nor adoption by the people to meet this objective.
- Therefore, I believe that the following numbers should be **increased by at least 33%**. This number is derived from the Parking Analysis. I have attempted to contact Fehr & Peers (contracted to conduct the Parking and Transportation Analysis) but have not received a call back in regard to their analysis.
- Conclusion: Mariposa/PCH intersection will be inundated and cause significant short cutting on residential streets. Also, Mariposa traffic situation will be aggravated significantly.
- Mariposa Ave not even evaluated, the congestion, speeding and hazards to children and all residents will increase.
- Shortcut traffic will pass by 4 parks (Independence, Constitution, Washington and Freedom Park) creating a hazard for children and park goers.

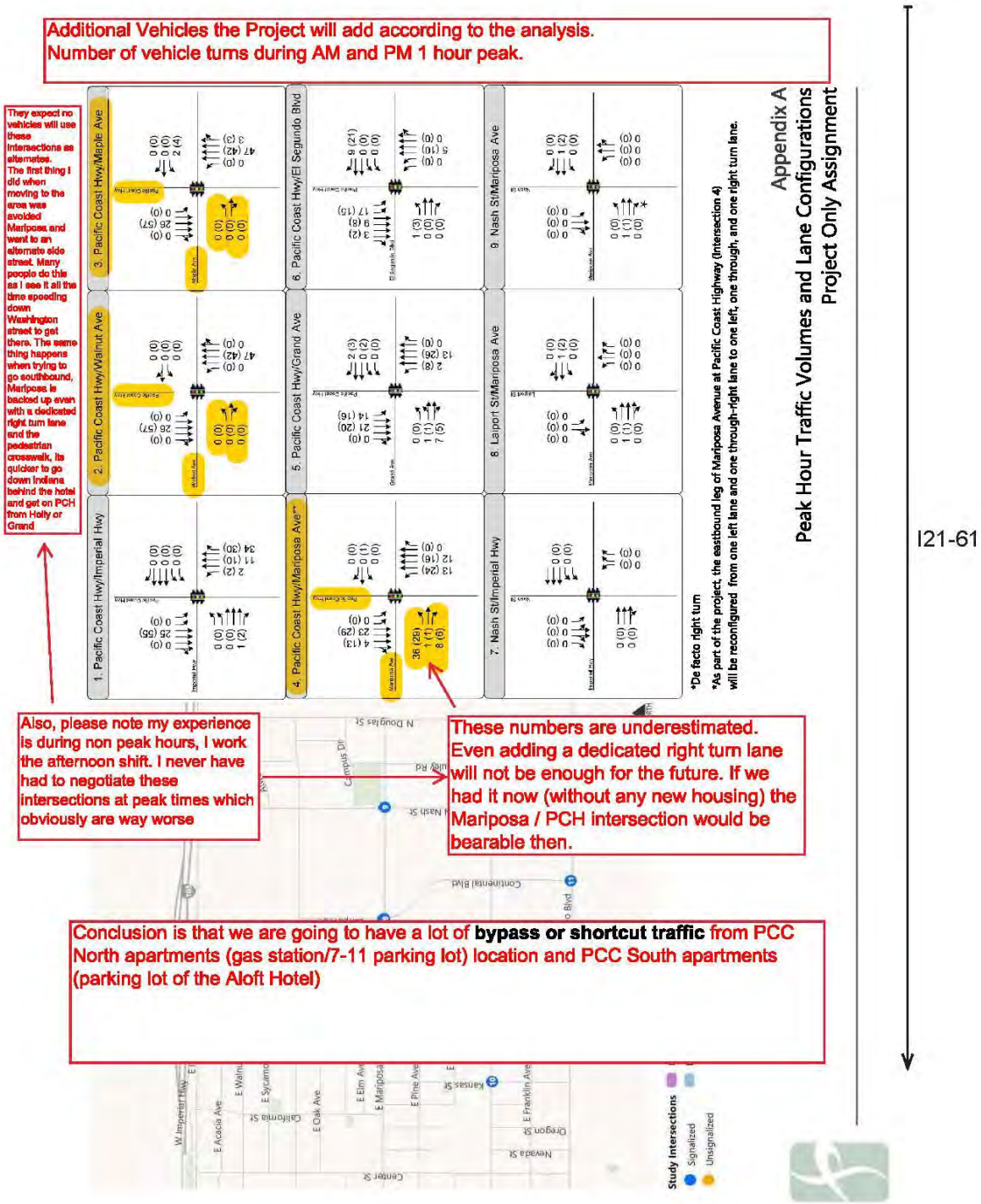
I21-59
Cont.


PREPARED BY
FEHR PEERS
600 Wilshire Blvd, Suite 1050
Los Angeles, CA
213.261.3050
Pacific Coast Commons
Transportation Impact Analysis
525 Pacific Coast Highway
El Segundo, CA 90245
November 2020

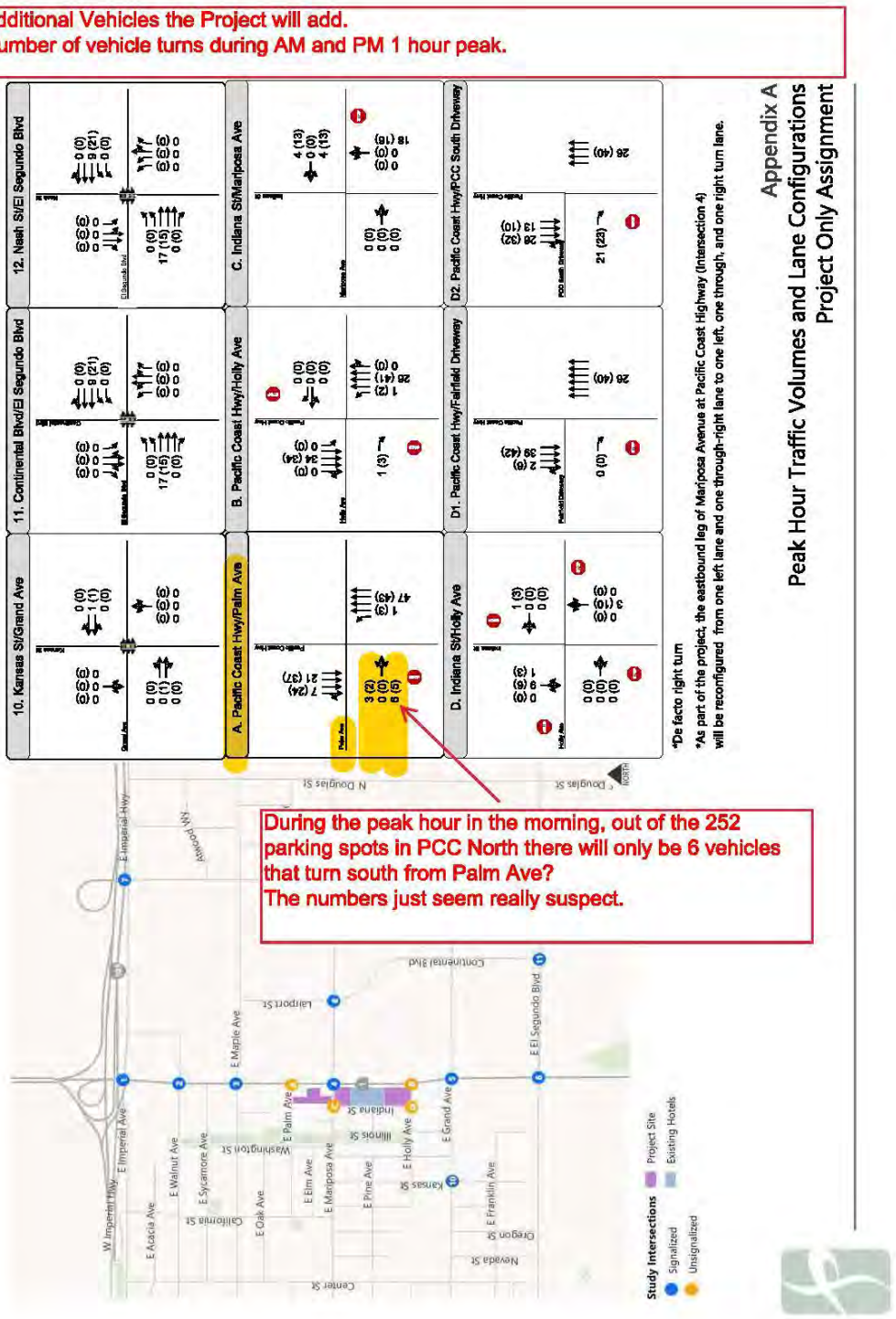
APPENDIX A:
LANE CONFIGURATIONS AND TRAFFIC VOLUMES


Existing Conditions without the Construction
Legend: Peak 1 hour - # cars making turns in the AM (# cars making turns in the PM)
ie: 101(49) 101 cars turn left off of Maple Ave onto PCH during AM rush hour and 49 cars turn left off of Maple onto PCH during PM rush
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Existing (2019) Conditions
I21-60
3. Pacific Coast Hwy/Maple Ave
2. Pacific Coast Hwy/Walnut Ave
1. Pacific Coast Hwy/Imperial Hwy
6. Pacific Coast Hwy/El Segundo Blvd
5. Pacific Coast Hwy/Grand Ave
4. Pacific Coast Hwy/Mariposa Ave
9. Nash St/Mariposa Ave
8. Laiport St/Mariposa Ave
7. Nash St/Imperial Hwy
*De facto right turn lane
Study Intersections
Signalized
Unsignalized
Project Site
Existing Hotels


Existing Conditions without the Construction
I21-60 Cont.
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Existing (2019) Conditions
10. Kansas St/Grand Ave
11. Continental Blvd/El Segundo Blvd
12. Nash St/El Segundo Blvd
A. Pacific Coast Hwy/Palm Ave
B. Pacific Coast Hwy/Holly Ave
C. Indiana St/Mariposa Ave
D. Indiana St/Holly Ave
*De facto right turn lane
Study Intersections
Signalized
Unsignalized
Project Site
Existing Hotels

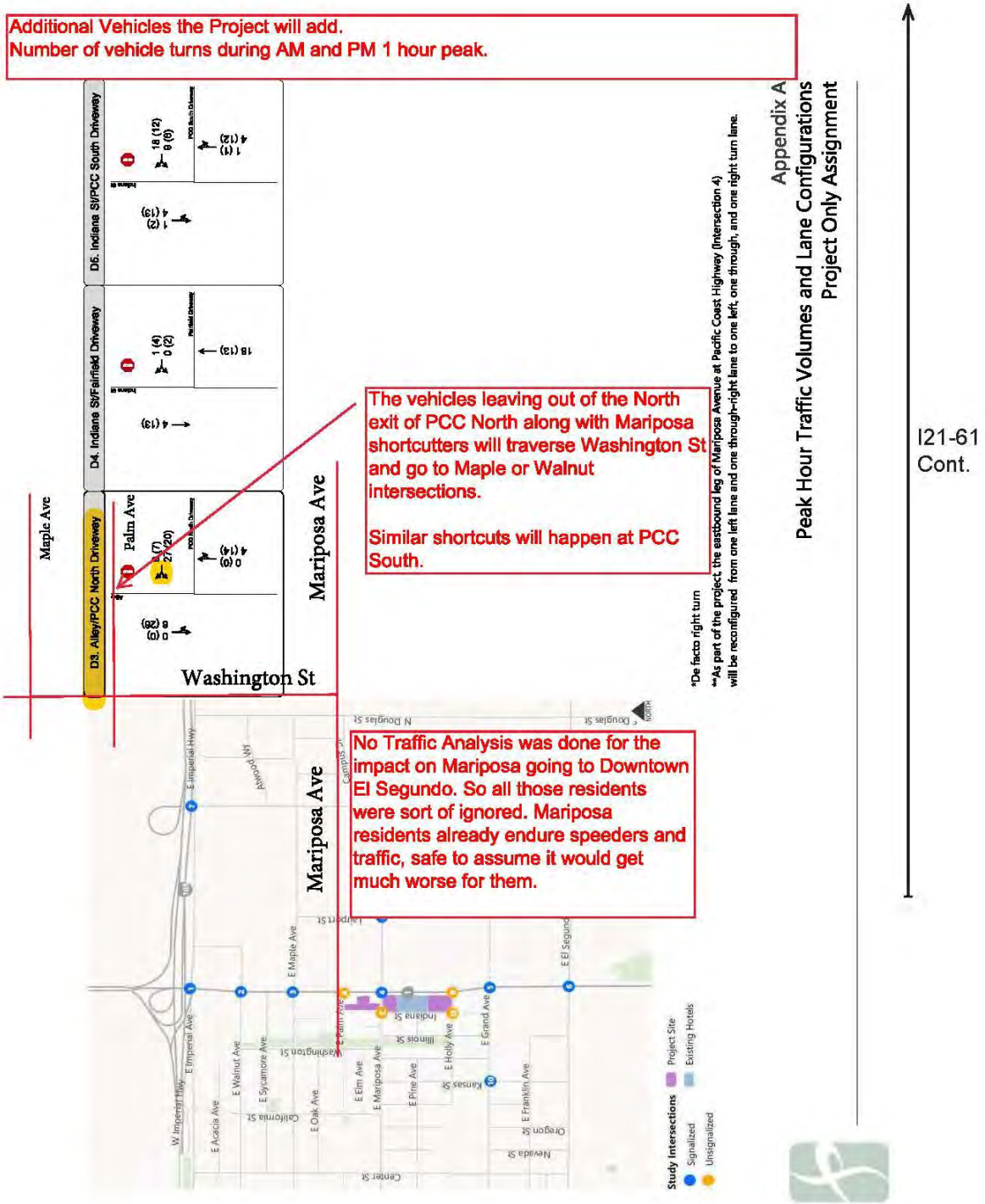

Additional Vehicles the Project will add according to the analysis.
Number of vehicle turns during AM and PM 1 hour peak.
They expect no vehicles will use these intersections as alternates. The first thing I did when moving to the area was avoided Mariposa and went to an alternate side street. Many people do this as I see it all the time speeding down Washington street to get there. The same thing happens when trying to go southbound, Mariposa is backed up even with a dedicated right turn lane and the pedestrian crosswalk, its quicker to go down Indiana behind the hotel and get on PCH from Holly or Grand
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Project Only Assignment
I21-61
1. Pacific Coast Hwy/Imperial Hwy
2. Pacific Coast Hwy/Walnut Ave
3. Pacific Coast Hwy/Maple Ave
4. Pacific Coast Hwy/Mariposa Ave*
5. Pacific Coast Hwy/Grand Ave
6. Pacific Coast Hwy/El Segundo Blvd
7. Nash St/Imperial Hwy
8. Laport St/Mariposa Ave
9. Nash St/Mariposa Ave
*De facto right turn
*As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.
Also, please note my experience is during non peak hours, I work the afternoon shift. I never have had to negotiate these intersections at peak times which obviously are way worse
These numbers are underestimated. Even adding a dedicated right turn lane will not be enough for the future. If we had it now (without any new housing) the Mariposa / PCH intersection would be bearable then.
Conclusion is that we are going to have a lot of bypass or shortcut traffic from PCC North apartments (gas station/7-11 parking lot) location and PCC South apartments (parking lot of the Aloft Hotel)
Study Intersections
Signalized
Unsignalized

Additional Vehicles the Project will add.
Number of vehicle turns during AM and PM 1 hour peak.



During the peak hour in the morning, out of the 252 parking spots in PCC North there will only be 6 vehicles that turn south from Palm Ave?
The numbers just seem really suspect.

I21-61
Cont.


Additional Vehicles the Project will add.
Number of vehicle turns during AM and PM 1 hour peak.
The vehicles leaving out of the North exit of PCC North along with Mariposa shortcutters will traverse Washington St and go to Maple or Walnut intersections.
Similar shortcuts will happen at PCC South.
No Traffic Analysis was done for the impact on Mariposa going to Downtown El Segundo. So all those residents were sort of ignored. Mariposa residents already endure speeders and traffic, safe to assume it would get much worse for them.
Appendix A
Peak Hour Traffic Volumes and Lane Configurations
Project Only Assignment
I21-61
Cont.
D6. Indiana St/PCC South Driveway
D4. Indiana St/Fairfield Driveway
D3. Alley/PCC North Driveway
Maple Ave
Palm Ave
Mariposa Ave
Washington St
*De facto right turn
**As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (Intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.
Study Intersections
Signalized
Unsignalized
Project Site
Existing Hotels

Parking Review

I21-62

Parking Analysis Summary

- Standards used as basis are not representative (should simply used realistic standard set forth by the City of El Segundo as seen on page 5, Table 2. Also the data sampling is suspect and not representative of the immediate surrounding area.

- Traffic on surrounding streets is based on these super low estimates of additional personal vehicles coming to the area. 2 cars per unit is the reality as seen historically across SoCal, these estimates are hopes and dreams. It's aspirational and can't disagree with that, but we're putting the cart before the horse.

- We need a culture of fewer cars or a very high cost of vehicle ownership **before** housing ideas can capitalize on that.

    - If we (El Segundo, Los Angeles) were a city like Tokyo, Singapore or even New York then this makes sense. In Singapore a run of the mill Toyota Corolla equivalent is priced at around $75,000 and registration of a vehicle is over $10,000/yr. We have nothing like that.
    - We do not have well established nor mass adoption of mass transit. LA has tried this for decades and has never worked. Do not get me wrong I wish it would work but it just has not. We need this first, and then housing will follow. **Does anyone think just because someone else wants them to take the transit and walk to downtown and own fewer vehicles it will just happen because we hope it? It's certainly not happening now, how will it magically happen after this proposal?**
    - The numbers for Transportation and Parking are just hopes and dreams, new residents are going to come with the well established historical average of 2 cars/unit.

- "Downtown is walkable distance." It is not. I have never ever seen anyone walk that distance to get to downtown. I have, but only for exercise. People won't even walk to Ralphs from 2 blocks away. I live close to project site and am about 1-2 blocks away from Ralphs. Wife and I walk to Ralphs always and get our groceries with a cart. I, maybe once every 3 months see someone walking to Ralphs and then walking home. If you can't get people to walk 1 or 2 blocks ever, how do we think they are going to walk downtown or to transit? LA has always been about cars (not that I don't think it should change, but we do not have alternatives in place that have been adopted yet. Maybe after Tesla gets full auto driving vehicles or autonomous ride share working that may change the dynamic, but we are putting the cart before the horse). This reliance on walking to justify the dense housing is not realistic at this point in time. Let's be honest, it is going to be 2 POVs per Dwelling Unit as consistent with El Segundo standard. That is reality. I am not opposed to a change and actually look forward to it and excited about it, but we have no infrastructure nor adoption by the people to meet this objective.

- Also, please note the number of parking spots available total are shared between the 2 high density apartment buildings, 2 hotels, retail space and a restaurant. So this means that if parking runs out in PCC North then the individual will need walk to another structure and park their vehicle. Just don't see this ending well. This isn't mid town Manhattan.

I21-62
Cont.

FEHR PEERS

MEMORANDUM

Date: February 17, 2021
To: Lionel Uhry, Mar Ventures
From: Vivian Lee and Tom Gaul
Subject: Pacific Coast Commons – Shared Parking Analysis *LA19-3078*

Fehr & Peers conducted a shared parking analysis for the proposed Pacific Coast Commons (PCC) development. The objective of the shared parking analysis is to assess the potential parking demand of each of the three various sites of the project at full buildout to determine whether the proposed supply is adequate to meet peak demand. This report outlines the methodology used for the shared parking analysis, as well as the methodology used to determine the parking ratios used for the hotel and the residential land uses that is used in the shared parking analysis.

PROJECT DESCRIPTION

Pacific Coast Commons is proposed mixed-use development in the City of El Segundo consisting of 263 residential dwelling units and 11,000 square feet of commercial space. The project is just over ½-mile from the Metro Mariposa Green Line Station and is also serviced by several bus routes including two local Metro (Route 232 and 625), one local Beach Cities Transit (109), and two LADOT Commuter Express (Route 438, 574) routes. The residential buildings would provide a mix of 91 studio, 119 one-bedroom, and 47 two-bedroom units with parking provided in new parking structures. Six townhouse-style units are also proposed, each of which would provide individual garages. For the purpose of this analysis, the project is separated into three different sites, as follows:

- PCC North Site [Land Use Area 5]
  - 143 residential units (137 apartments & 6 townhomes)
    - 47 Studios
    - 67 One-Bedrooms
    - 23 Two-Bedrooms
  - 2,223 square feet of retail space
  - 253 total parking spaces
    - 241 parking spaces
    - 12 townhome parking spaces in individual garages

- PCC Fairfield Site [Land Use Area 3 & 4]
  - Fairfield Hotel (350 rooms, already in operation)
  - 3,273 square feet of retail space
  - 215 replacement parking spaces for the Fairfield Hotel

PARKING DEMAND ASSUMPTIONS

To determine the parking demand for Pacific Coast Commons, the following assumptions were made:

- Each of the three garages can be utilized as "overflow" parking if needed due to one of the other sites parking demand exceeding its on-site supply.[2]
- Peak parking demand rates for the residential units was estimated based on data from the El Segundo Municipal Code parking requirements and the Institute of Transportation Engineers' (ITE) *Parking Generation, 5th Edition*[3]; as discussed further below.
- The parking provided for residents of the townhouses in the individual garages were not included as part of the analysis, but guest parking for the townhouses were included in the shared parking calculation.
- The hotel peak parking demand rate was calculated using empirical data collected in May 2019 as part of this study at the Aloft and Fairfield hotels already operating onsite; as discussed further below.
- Peak parking demands for the retail and restaurant uses was estimated based on the El Segundo Municipal Code parking requirements for those uses.

RESIDENTIAL PARKING SUPPLY AND DEMAND RATE

Residential Parking Demand Research

To better understand the appropriate residential parking demand at Pacific Coast Commons, Fehr & Peers researched available data on parking demands at similar multifamily residential developments.

ITE Parking Generation Manual, 5th Edition

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

I21-62 Cont.

The Institute of Transportation Engineers published *Parking Generation, 5th Edition* in early 2019. The manual has traditionally provided parking demand rates for various land uses based on survey data collected in suburban, low-density areas. The 5th Edition includes additional survey data from Center City Core and Dense Multi-Use Urban locations as well. The latest survey information differentiates whether the survey data was collected within close proximity (½ mile) to rail transit. While the report does not provide authoritative findings, recommendations, or standards on parking demand, it is often referenced by planners and designers in making parking supply estimations and decisions.

Table 1 summarizes the parking supply recommendations from ITE for mid-rise multifamily housing developments. The General Urban/Suburban not within ½ mile of rail transit rates are the most conservative, although it should be noted that Pacific Coast Commons is located approximately ½ mile from the Metro Green Line Mariposa Station.

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[2] Based on Conditional Use Permits approved by the El Segundo Planning Commission on October 9, 2014.
[3] *Parking Generation, 5th Edition.* Institute of Transportation Professionals. (2019). https://www.ite.org/technical-resources/topics/trip-and-parking-generation/

Are the standards specific to Los Angeles, New York, Chicago? SoCal has had a long history of attempting to build and have people adopt mass transit but it has never worked. The study seems to be banking on it as if we did.

Table 1: Mid-Rise Multifamily Apartment Parking Generation Rates

Setting	Proximity to Rail Transit	Per Dwelling Unit	Per Bedroom
Center City Core	Within ½ mile of rail transit	1.1	1.0
Dense Multi-Use Urban	Within ½ mile of rail transit	1.2	0.9
	Not within ½ mile of rail transit	1.2	0.8
General Urban/Suburban	Within ½ mile of rail transit	1.5	0.8
	Not within ½ mile of rail transit	1.7	1.0

I lived in SF Bay Area, BART and CalTrain used way way more than here. They at least have some people doing it. Also CalTrain, runs right through Palo Alto and immediately adjacent Stanford University. Students living in apartments are more likely to use it. We are comparing apples to oranges here.

Palo Alto Multifamily Parking Demand Rate Study

Fehr & Peers conducted a study in April 2018 to provide the City of Palo Alto with parking demand rate data for multifamily developments. This report includes information from available reports, documents, studies, and the results of parking surveys conducted at multifamily developments as part of this study. Empirical data informed the parking demand rate information for market rate, affordable, and senior housing projects, as well as the change in parking demand when located near a robust transit system.

To begin, Fehr & Peers reviewed several reports and studies that included parking demand rates for multifamily market rate, affordable, and senior residential developments in the Bay Area. Fehr & Peers also conducted new parking surveys at nine multifamily complexes in the City of Palo Alto. Available information about each site, such as the number of units, walking distance (½ mile) to the nearest rail station, type of rail service, peak parking demand, parking supply and demand rates were documented. Parking occupancy surveys were conducted to count the numbers of parked vehicles by space type on a weekday (Tuesday, Wednesday, or Thursday) at three time periods (midday, evening, and late night – after midnight) and on a weekend day at two time periods (midday and late night).

Relevant conclusions for Pacific Coast Commons from the data collection effort, which includes all prior studies and the Palo Alto surveys are:

- For Market Rate units, the average surveyed parking demand rate is approximately 0.75 spaces per bedroom
  - Proximity to transit can reduce the rate by approximately 25 percent

Actually, on the contrary we have no relevant studies whatsoever that match our community nor Los Angeles adoption nor infrastructure built. We have the opposite, decades of failed attempts of construction and adoption.

El Segundo Municipal Code Parking Requirements

The El Segundo Municipal Code provides the number of required on-site parking spaces for the different land uses allowed within the city. Section 15-15-6 presents the following requirements for multifamily developments:

- Two spaces per dwelling unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

I21-62 Cont.

Table 2 summarizes the relevant parking data previously presented and applies it to the Pacific Coast Commons project. The table shows the projected demand based on the different parking rates.

Table 2: Summary of Parking Demand Rates

	Parking Spaces Per DU	Parking Spaces Per Bedroom	Pacific Coast Commons Parking Demand
ITE Parking Generation Manual	1.7	1.0	437 spaces (based on # of DUs); 304 spaces (based on # of bedrooms)
Palo Alto Multifamily Parking Demand Rate Study	N/A	0.75	228 spaces (based on # of bedrooms)
El Segundo Municipal Code Parking Requirements	2 per resident DU plus 1 guest space per 3 DUs	N/A	601 spaces (based on # of DUs)

This is the most reliable and realistic demand rate for the proposal. It fits with the LA standard and has already been adopted by El Segundo Municipal Codes. Also just Google it for yourself, datala.usa Los Angeles. It's no big secret or conspiracy just common sense.

I21-62 Cont.

Pacific Coast Commons Residential Parking Demand Rate

Based on the residential parking demand studies reviewed above, the following parking demand rates based on using a combination of ITE *Parking Generation* rates and El Segundo Municipal Parking requirements were used for the shared parking analysis:

- One resident space per bedroom
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

As shown in **Table 2**, this demand rate for the Pacific Coast Commons is conservative when compared to other similar projects (market rate, outside the ½ mile rail, etc.). Assuming that the demand is equal to the El Segundo Municipal Code requirements or the ITE rates based on dwelling units would likely result in an oversupply of parking and underutilization of spaces.

Also remember this more realistic total will drastically change the Transportation Analysis

Table 3 shows the total parking demand based on the above demand rate.

All of these cars will need to compete with the 2 hotels, new retail units and a restaurant as well.

Table 3: Pacific Coast Commons Residential Parking Demand

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces	
				El Segundo Std : 2 cars/dwelling unit
Residential				
Studio	1 space/ bedroom	91 bedrooms	91	182
1 Bedroom	1 space/ bedroom	119 bedrooms	119	238
2 Bedroom	1 space/ bedroom	94 bedrooms	94	94 (94 bdrms = 47 units)
Guest	1 space/ 3 units [a]	263 units	87	87
		Total	**391**	601 total

1. ITE Study not customized for LA
2. Palo Alto certainly doesn't reflect this area
3. People are not going to forgo a vehicle because they are close to transit, even if they were to use it once and a while
4. A significant number of people using transit is highly unlikely. We don't even have a study of the current population in the vicinity
5. Downtown and Transit aren't realistically walkable in any way and is not going to put a dent in the number of cars parked nor used.
6. Mass transit is aspirational, but right now hopes and dreams shouldn't be a substitute for the reality of 2 cars per dwelling unit

Page 5

Realistic vehicle estimate

I21-62 Cont.

Parking demand for residents is projected to be 304 spaces. Demand for residential guests is estimated to be 87 spaces, for a total demand of 391 parking spaces.

Pacific Coast Commons Residential Parking Supply

However, the Pacific Coast Commons project is proposing to provide parking using a modified residential parking requirement, based on unit type/number of bedrooms, which is more conservative than the demand rate. The follow parking supply is proposed:

- One space per studio unit
- 1.5 spaces per one-bedroom unit
- Two spaces per two-bedroom unit
- One guest space for every 3 units (3-5 units = 1 visitor space, 6-8 units, 2 visitor spaces, etc.)

Table 4 shows the proposed parking supply based on the above modified residential parking requirements.

Table 4: Pacific Coast Commons Proposed Residential Parking Supply

Land Use	Proposed Parking Rate	Size	Proposed Vehicle Spaces
Residential			
Studio	1 space/ unit	91 units	91
1 Bedroom	1.5 space/ unit	119 units	179
2 Bedroom	2 space/ unit	47 units	94
Guest	1 space/ 3 units	263 units	87
		Total	**451**

Based on the proposed parking supply rates, 364 total spaces would be supplied for residential tenant use. The estimated demand for the residents is 304 spaces, which projects an oversupply of 60 spaces. Guest parking would be provided in the shared pool of parking.

This 1/2 space is calculated in the total supply. How big actually is 1/2 space? Would a mid-size sedan fit? How wide is it? It's like when you see all those "compact" parking spaces in a parking garage. They're overtaken even by mid-size vehicles. My guess is that the majority of the 119 one bedrooms units will use it to store bikes or maybe a scooter. This 1/2 space skews the true supply which will then be lower.

I21-62
Cont.

HOTEL PARKING DEMAND RATE

Although hotel rates are available from ITE, these rates are highly variable. Since the hotels for this project are currently in operation, Fehr & Peers conducted an empirical analysis of the existing parking demands at the Fairfield and Aloft Hotels, in place of using the ITE rates.

Existing Parking Supply

A series of parking lots currently serve the Fairfield Hotel and the Aloft Hotel. The "North" parking lot, located north of Mariposa Avenue, provides 232 parking spaces. This parking lot is currently gate controlled. The on-site parking lot at the Fairfield Hotel provides 33 parking spaces. The Aloft Hotel parking lot, located north of Holly Avenue, provides 165 parking spaces. The Conditional Use Permit for the hotels allows the Fairfield and Aloft Hotels to share the parking in the North parking lot north of Mariposa Avenue; therefore, the series of parking lots is viewed in this analysis as a system containing a total of 430 parking spaces. All parking lots are utilized by hotel guests and employees.

Existing Parking Occupancy

These are not peak season numbers either. Summer obviously would be peak

Parking utilization counts were conducted at the parking lots serving the Fairfield Hotel and the Aloft Hotel on Thursday, May 2nd and Sunday, May 5th, 2019, at 2:00 AM. These days and times were selected as they represent the busiest weekday night and weekend night on average for both hotels.

Sunday night? Usually Saturday night is the busiest

Table 5 shows the occupied spaces at each parking lot on both nights. On Wednesday night/early Thursday morning, the North parking lot was 53% occupied, the Fairfield on-site parking lot was 58% occupied, and the Aloft parking lot was 61% occupied. In total, the three lots combined were 56% occupied. On Saturday night/early Sunday morning, the North parking lot was 69% occupied, the Fairfield on-site parking lot was 45% occupied, and the Aloft parking lot was 56% occupied. In total, the three lots combined were 62% occupied. Count sheets can be found in **Appendix A**.

I21-62 Cont.

Both hotels have a higher demand rate on the weekend than weekday, even though more rooms are occupied during the weekday. This is likely due to more families/tourists staying at the hotel during the weekends and having personal/rental cars with them. During the week, the hotel guests are more likely to be there for business and utilize ride sharing vehicles for their stay. Similarly, the flight crews which stay at the hotel often during the week do not need parking spaces.

Parking Demand at Full Hotel Occupancy

The number of spaces occupied assuming full hotel occupancy was calculated using the higher observed demand rate for the entire site, which occurred on the weekend. At the Fairfield Hotel, 207 spaces are projected to be demanded when the hotel is at full occupancy. At the Aloft Hotel, 145 spaces are projected to be demanded when the hotel is at full occupancy. This is shown in **Table 8**. The overall demand for parking is 352 spaces when both the Fairfield and Aloft are at full room capacity.

Table 8: Peak Hotel Parking Demand at Full Occupancy

Hotel	Peak Demand Rate	Hotel Rooms	Peak Parking Demand at Full Occupancy
Fairfield	0.59	350	207
Aloft	0.59	246	145
Total	0.59	596	352

This is based on non summer and non Saturday night data. I don't see this at all as "Peak Demand Rate". Now it may be demand rate during the low season, but not representative for the basis of such a large and potentially impactful development.

I21-62 Cont.

PARKING DEMAND PROJECTIONS

Because each of the three garages will be utilized as "overflow" parking if needed, the project was analyzed as one combined site. While each individual site's peak parking demand occurs at different hours, it was determined that the peak parking demand for the three sites combined would occur at 10:00 PM on a weekday (in June). Shared parking analysis worksheets for each site can be found in the **Appendix B. Table 10** summarizes the proposed parking supply by site and total. **Table 11** summarizes the estimated peak demand.

Table 10: Pacific Coast Common Parking Supply

Site	Parking Supply	Residential Reserved	Shared Spaces
North	241	189	52
Fairfield	215	0	215
South	336	165	171
Total	792	354	438

Summary from numbers below Table 11

Demand	Supply
Residential...514	
Shared.....462	
Total.....976	Total.....792

Total Deficit = -184 spaces

Table 11: Pacific Coast Common Parking Peak Demand, Weekday, June at 10 PM

Area	Residential Demand	Shared Use Demand				Total Shared Demand	Shared Surplus/ Deficit
		Residential Guest	Hotel	Retail	Restaurant		
North	160	48	0	1	0	49	3
Fairfield	0	0	188	3	0	191	24
South	144	40	133	1	18	192	-21
Total	304	88	321	5	18	432	6
From Table 3, page 5 →	514	87	352	5	18	462	-24*

conservative as explained on page 10

not sure where these numbers are estimated from but we'll go with them

* reminder this is shared space only

I21-62 Cont.

PCC NORTH SITE

As shown in **Table 10**, the project proposes 241 parking spaces for the North Site, with 189 parking spaces reserved for exclusively for residential tenant use. The remaining 52 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites.

As summarized in **Table 11**, the North site is projected to have a peak residential parking demand of 160 parking spaces and a peak shared parking demand of 49 spaces. As such, the North site is projected to have a surplus of three shared parking spaces during the peak demand period.

PCC FAIRFIELD SITE

The Fairfield site's peak parking shared demand is estimated to be 191 spaces. As shown in **Table 11**, the project proposes 215 parking spaces, indicating sufficient supply for the anticipated demand with a surplus of 24 spaces during the peak demand period.

PCC SOUTH SITE

As shown in **Table 10**, the project proposes 336 parking spaces for the South Site, with 165 parking spaces reserved for exclusively for residential tenant use. The remaining 171 spaces would be shared between the residential guest parking, commercial uses, and for overflow if needed from the other sites. As summarized in **Table 11**, The South site is estimated to have a peak residential parking demand of 144 parking spaces and a peak shared parking demand of 192 spaces. As such, the South site would have a deficit of 21 shared parking spaces during the peak demand period. The excess demand can be accommodated by the surplus of spaces at the North and Fairfield sites, which have a combined surplus of 27 spaces.

CONCLUSION

The shared parking analysis demonstrates that sufficient parking would be provided to meet the demand of the various uses on-site.

It is anticipated that retail/restaurant patrons will be provided with free validated parking in the structures, hotel guests will continue to be charged for parking, and residents will not be charged a separate parking fee from their base rental rate. A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street.

My conclusion is that we will have a shortage of parking (potentially short 184 spaces) and the subsequent Transportation Analysis will be significantly impacted.

This conclusion is based primarily on:

1. 2 cars per Dwelling Unit is a long standing average
2. The 1/2 space for 1 bedroom units is suspect to be effectively usable for cars or trucks by a significant number of residents.
3. We should be planning for at least the long standing average and reasonable foreseeable usage of parking spaces especially for a project of this magnitude for the neighborhood.

I21-62
Cont.

Alternatives Review

I21-63

Why aren't east of Sepulveda and south of Grand viable alternatives?
- They accomplish most all of the objectives much better than the current proposal
- They have minimal negatives impacts to the community especially compared to current proposal
- It would be a win-win

I21-63 Cont.

This chapter describes and evaluates alternatives to the Pacific Coast Commons Specific Plan (Specific Plan or Project). This chapter implements the requirements set forth in the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), and identifies the Environmentally Superior Project Alternative, as required by CEQA Guidelines Section 15126.6(e)(2).

6.1 Introduction

CEQA requires that Environmental Impact Reports (EIRs) "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" (14 CCR 15126.6[a]). The CEQA Guidelines direct that the selection of alternatives be governed by "a rule of reason" (14 CCR 15126.6[a] and [f]). As defined by the CEQA Guidelines (14 CCR 15126.6[f]):

> The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the Lead Agency determines could feasibly attain most of the basic objectives of the project.

As presented in prior sections of this Draft EIR, the Project would not result in significant and unavoidable impacts after implementation of all mitigation measures, with the exception of conflicts related to exceedance of population growth projections in the applicable Air Quality Management Plan (AQMP). Consistent with CEQA, the analysis presented in this chapter considers a reasonable range of alternatives to the proposed Project and evaluates their comparative environmental impacts. The selection of alternatives and their discussion must "foster informed decision making and public participation" (14 CCR 15126.6[a]). Therefore, this chapter identifies potential alternatives to the proposed Project and evaluates them, as required by CEQA.

The inclusion of an alternative in an EIR does not constitute definitive evidence that the alternative is in fact "feasible." The final decision regarding the feasibility of alternatives lies with the decision maker(s) for a given project, who must make the necessary findings addressing the potential feasibility of an alternative, including whether it meets most of the basic project objectives (further described in Section 6.2, Project Objectives) or reduces the severity of significant environmental effects pursuant to CEQA (California Public Resources Code, Section 21081; see also 14 CCR 15091).

This Draft EIR includes the analysis of three alternatives to the proposed Project:

- Alternative A – No Project/Existing Development
- Alternative B – Reduced Development Alternative: Exclusion of PCC–North
- Alternative C – Reduced Development: Reduce 1 Level from PCC-South and PCC-North

6.2 Project Objectives page 6-2 (next page)

- Item 2 : this adversely will impact neighboring residents. I don't see anything in the proposal that mitigates negative impacts to neighbors:
    - **Traffic**
    - **Safety (higher traffic adjacent to numerous parks)**
    - **Parking**
    - **Noise**
    - **Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have**
    - **Schools Lower teacher to student ratio**
    - **Equates to lower quality of life and lower home values**

I21-64

- Item 4: vehicular circulation will get worse without a doubt. I will later go on to critique the EIR data but allow me to relay my personal experience. I live adjacent to Washington Park. When I first moved there it only took me a week to figure out that the Mariposa & PCH intersection is to be avoided at all costs no matter if I was headed north or southbound PCH. An aggravating factor is that I was seeing this always during **non-peak hours**. Peak hours are significantly worse. If I need to go north bound I would and will never use Mariposa, I will always bypass that intersection and head further north on Washington and get onto PCH via Maple. If I'm headed southbound I will approach Mariposa PCH and typically bypass the intersection via Indiana and pop out on Holly or Grand. These bypasses and shortcuts happened during non-peak hours, **so add to this 263 more dwelling units during peak hours**, traffic will increase significantly on these streets. Safety of park users will be at risk, not to mention numerous other negative impacts. New residents will figure this out just like I did, nothing surprising, everyone does it and will continue to do it. And in my opinion, and I will go into further detail later, the EIR data is severely underestimated both on standards used and data that is collected which ultimately results in recommendations on the top level Executive Summary. The devil is in the details and when you look at it, there are some serious flaws.

I21-65

- Item 7: please see *"ES.3.2 page ES-6 #6 comments in prior section"*

I21-66

6.2 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the Project. The objectives assist the City of El Segundo (City) in developing a reasonable range of alternatives to be evaluated in the EIR. The Project's specific objectives are as follows:

1. Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses.
2. Provide for additional housing opportunities in a variety of housing sizes, types, and densities that support the goals of the Housing Element of the City's General Plan.
3. Improve the jobs/housing balance in the City of El Segundo, help address the regional housing shortage, and support and retain existing businesses by providing needed housing for employees.
4. Enhance vehicular circulation through intersection improvements and street widening.
5. Facilitate a safe and walkable community along Pacific Coast Highway by providing a mix of land uses, including commercial at the street-level with residential uses above.
6. Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.
7. Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.

I21-64 Cont.

I21-65 Cont.

I21-66 Cont.

6.3 Significant and Unavoidable Impacts

The proposed Project would result in a significant and unavoidable impact related to the potential for the proposed Project to conflict with an Air Quality Management Plan (AQMP). As described in Section 4.2, Air Quality, the Project site is located within the South Coast Air Basin (SCAB), under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD administers the AQMP for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards and National Ambient Air Quality Standards. The SCAQMD has established criteria for determining consistency with the currently applicable AQMP:

- Consistency Criterion No. 1: The project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

The proposed Project would not exceed the SCAQMD criteria air pollutant mass thresholds and would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations; thus, the proposed Project would not conflict with Consistency Criterion No. 1. However, the proposed Project would result in population growth that would exceed the population growth anticipated for the City in SCAG's regional growth forecast, and therefore conflict with Consistency Criterion No. 2. Although the Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [RTP/SCS]) is the most recent RTP/SCS, the SCAQMD is still in the early stages of updating its AQMP (anticipated to be released in 2022). Therefore, the SCAG 2016 RTP/SCS and associated Regional Growth Forecast would be applicable in this analysis of the potential to

conflict with the SCAQMD 2016 AQMP, as required in Section 4.2, Air Quality. In the 2016 RTP/SCS, SCAG estimated 16,700 residents in the City in 2012 and 17,300 residents by 2040. The proposed Project's residential units would accommodate 618 individuals upon its occupancy in 2025. Considering the population growth anticipated in the 2016 RTP/SCS of 600 individuals within the City between 2012 and 2040, the proposed Project would result in a population growth in the City that would exceed the growth assumptions in the 2016 RTP/SCS, and would thereby exceed the population growth assumptions in the AQMP. The proposed Project would therefore conflict with the applicable AQMP, which would result in a significant and unavoidable impact. There is no feasible mitigation measure for population growth; therefore, this impact would be significant and unavoidable.

6.4 Alternatives Considered and Eliminated During the Project Planning Process

CEQA Guidelines Section 15126.6(c) recommends that an EIR identify any alternatives that were considered by the lead agency but were rejected as infeasible and briefly explain the reasons for their rejection. Among the factors described by CEQA Guidelines Section 15126.6 in determining whether to exclude alternatives from detailed consideration in an EIR are failure to meet most of the basic objectives of a project, infeasibility, or inability to avoid significant environmental impacts.

With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(I) states the following:

> Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries ... and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

In determining an appropriate range of Project alternatives to be evaluated in this EIR, a number of possible alternatives were initially considered and then rejected. One alternative for the Project was considered, but ultimately rejected from further analysis in the Draft EIR, consistent with Section 15126.6(c) of the CEQA Guidelines. A description of the potential alternative considered, but not carried forward, and the rationale for rejection is provided below.

Alternative Location

Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the Project. As stated in Section 15126.6(f)(2)(A), the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation, as further explained below.

The Project's proposed location is in an area of the City surrounded by a variety of land uses, including residential, recreational, office, and commercial retail uses. The adoption of a Specific Plan would allow for the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, and the redevelopment of existing surface parking

lots, as well as the Fairfield Inn and Suites Hotel Food and Beverage Building (formerly the Hacienda Restaurant), for 263 residential units, 11,252 gross square feet of commercial/retail uses, and three new parking structures. The current General Plan designation for the Project site is General Commercial and Parking. The Project would result in a General Plan Amendment and Zone Text Amendment to allow for the proposed Specific Plan. Since the City is largely built-out, few available properties of similar size as the Project site exist for the proposed Project.

Development of the proposed Project on an alternate site would result in a similar construction scenario, similar quantities of criteria air pollutant emissions during construction, similar levels of construction noise, and similar levels of energy consumption. Due to the generally built-out nature of the City, it is likely that demolition of existing buildings and paved areas would be required. Additionally, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen the air quality and noise impacts of the proposed Project during construction. Similarly, development at an alternate site would not necessarily reduce impacts to transportation and traffic, as the Project site is situated in an area surrounded by several transportation options and approximately 0.5 miles of the Metro C Line Mariposa Station.

Regardless of its location, the proposed Project would generally place similar demands on public services, utilities and services systems, and energy resources. With regard to the visibility and appearance of the Project, the aesthetic impact on the Project is largely related to its height and density, which would not substantially change at an alternative location. Additionally, the Project's commercial frontage intentionally fronts Pacific Coast Highway (PCH) while its residential uses are adjacent to existing residential uses along Indiana Street, which promotes a pedestrian-friendly interface on one of the City's most important thoroughfares.

Most sites within the City would be subject to similar geologic and geotechnical hazards. For these reasons, use of an alternative site would not likely result in a substantial reduction in the impacts of the Project. Additionally, the existing Fairfield Inn and Suites Hotel and Aloft Hotel would remain as non-conforming uses with the current General Plan and Zoning designations for the Project site if the Project is moved to an alternate location.

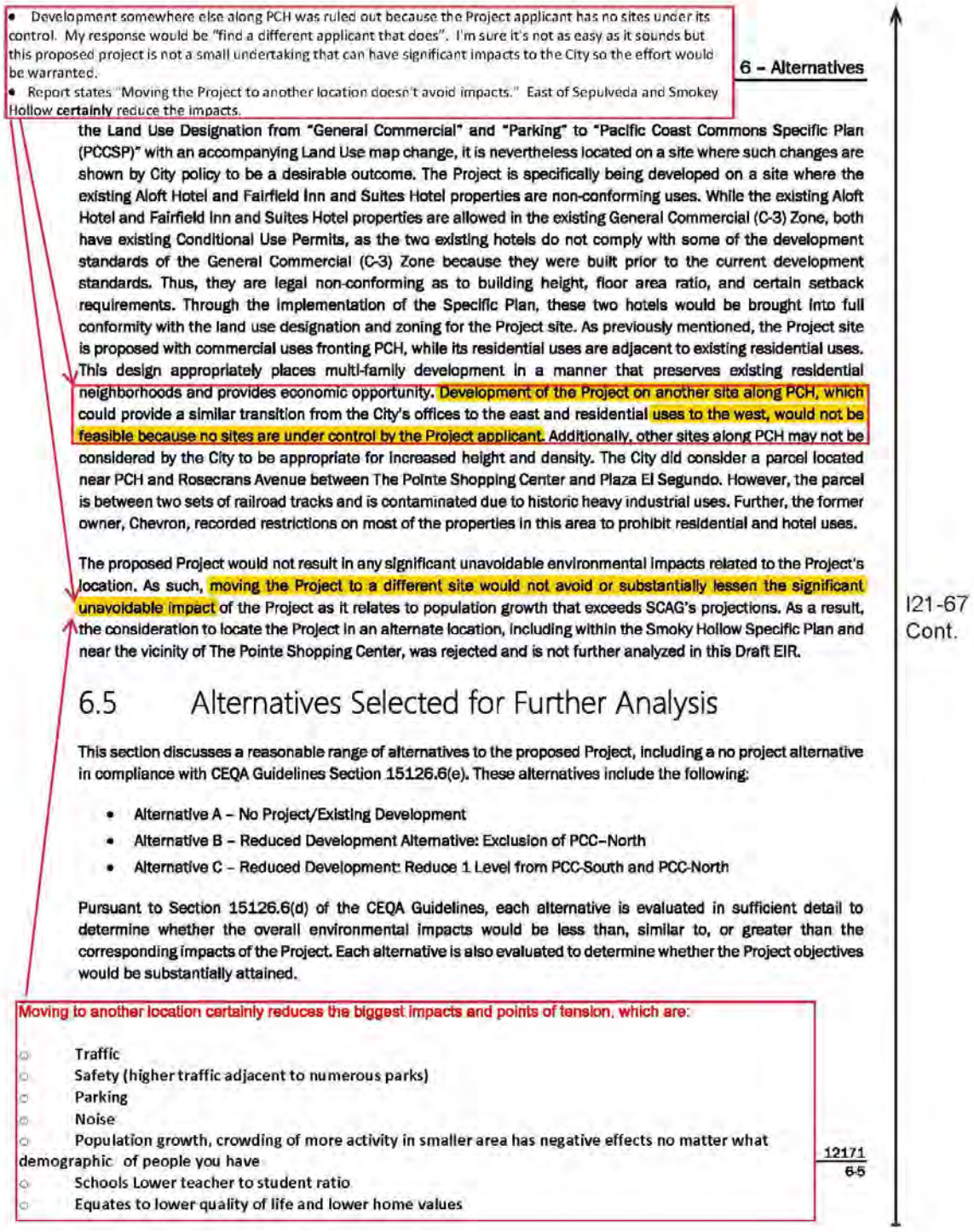
There are no known available sites within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The Smoky Hollow Specific Plan area extends east to west and is bounded by Indiana Street and PCH to the east, downtown El Segundo to the west, the Chevron oil refinery to the south. In response to shrinking manufacturing demand, declining investment, and parking issues, the City adopted the first Smoky Hollow Specific Plan in 1986. The updated Smoky Hollow Specific Plan (City of El Segundo 2018) sets a regulatory and planning framework that focuses development efforts on revitalizing buildings for incubator industrial and office space. Although this Specific Plan area is intended to facilitate redevelopment, the land use regulations within the Smoky Hollow Specific Plan are focused on one- and two-story commercial and industrial development, the land parcels are small and land assemblage could be a major obstacle, and would generally be incompatible with the Project's residential uses. Additionally, slightly greater air quality, land use, and transportation (vehicle miles traveled) impacts could occur if the proposed Project was developed within the Smoky Hollow Specific Plan. For example, the proposed site is just over 0.5- mile from the Metro C Line, whereas the Smoky Hollow Specific Plan area is farther away, thereby reducing potential access to regional transit for the Project's 618 future residents (see Section 4.11, Population and Housing).

Furthermore, construction of the Project on an alternative site may not be consistent with the City's land use plans and policies. While the Project is requesting the approval of a General Plan Amendment (No. GPA 19-01) to change

I21-67

Smokey Hollow ruled out due to it being a little further away from Transit, but wasn't one of the objectives to have Downtown El Segundo Walkable? This area actually is more equidistant between the 2 "walkable" areas. I don't believe people are gonna do the walking in the first place but if someone does believe that will happen, making it more equidistant would be a better alternative.

12171
6-4



• Development somewhere else along PCH was ruled out because the Project applicant has no sites under its control. My response would be "find a different applicant that does". I'm sure it's not as easy as it sounds but this proposed project is not a small undertaking that can have significant impacts to the City so the effort would be warranted.
• Report states "Moving the Project to another location doesn't avoid impacts." East of Sepulveda and Smokey Hollow certainly reduce the impacts.

6 – Alternatives

the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use map change, it is nevertheless located on a site where such changes are shown by City policy to be a desirable outcome. The Project is specifically being developed on a site where the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties are non-conforming uses. While the existing Aloft Hotel and Fairfield Inn and Suites Hotel properties are allowed in the existing General Commercial (C-3) Zone, both have existing Conditional Use Permits, as the two existing hotels do not comply with some of the development standards of the General Commercial (C-3) Zone because they were built prior to the current development standards. Thus, they are legal non-conforming as to building height, floor area ratio, and certain setback requirements. Through the implementation of the Specific Plan, these two hotels would be brought into full conformity with the land use designation and zoning for the Project site. As previously mentioned, the Project site is proposed with commercial uses fronting PCH, while its residential uses are adjacent to existing residential uses. This design appropriately places multi-family development in a manner that preserves existing residential neighborhoods and provides economic opportunity. Development of the Project on another site along PCH, which could provide a similar transition from the City's offices to the east and residential uses to the west, would not be feasible because no sites are under control by the Project applicant. Additionally, other sites along PCH may not be considered by the City to be appropriate for increased height and density. The City did consider a parcel located near PCH and Rosecrans Avenue between The Pointe Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses.

The proposed Project would not result in any significant unavoidable environmental impacts related to the Project's location. As such, moving the Project to a different site would not avoid or substantially lessen the significant unavoidable impact of the Project as it relates to population growth that exceeds SCAG's projections. As a result, the consideration to locate the Project in an alternate location, including within the Smoky Hollow Specific Plan and near the vicinity of The Pointe Shopping Center, was rejected and is not further analyzed in this Draft EIR.

I21-67 Cont.

6.5 Alternatives Selected for Further Analysis

This section discusses a reasonable range of alternatives to the proposed Project, including a no project alternative in compliance with CEQA Guidelines Section 15126.6(e). These alternatives include the following:

- Alternative A – No Project/Existing Development
- Alternative B – Reduced Development Alternative: Exclusion of PCC–North
- Alternative C – Reduced Development: Reduce 1 Level from PCC-South and PCC-North

Pursuant to Section 15126.6(d) of the CEQA Guidelines, each alternative is evaluated in sufficient detail to determine whether the overall environmental impacts would be less than, similar to, or greater than the corresponding impacts of the Project. Each alternative is also evaluated to determine whether the Project objectives would be substantially attained.

Moving to another location certainly reduces the biggest impacts and points of tension, which are:

- Traffic
- Safety (higher traffic adjacent to numerous parks)
- Parking
- Noise
- Population growth, crowding of more activity in smaller area has negative effects no matter what demographic of people you have
- Schools Lower teacher to student ratio
- Equates to lower quality of life and lower home values

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6-5

Utilities and Service Systems

The new development associated with Alternative C would result in new water service connections, sewer laterals, on-site stormwater infrastructure, and underground utility conduit systems for electricity and telecommunications, similar to the proposed Project. Minor alterations of existing on-site natural gas main/service branches may be required. Similar to the proposed Project, the construction of these new utility connections would be limited to the Project site and the immediately adjacent street frontages. As such, impacts associated with installation of utility facilities necessary for the PCC-South, PCC-Fairfield Parking, and PCC-North would be less than significant. Due to the decrease in units under Alternative C, the impacts related to construction of utilities and the demand for potable water, generation of wastewater, and generation of solid waste would be less than the proposed Project. Although the proposed Project's impacts to utilities was less than significant and no mitigation was required, impacts to utilities and service systems under Alternative C would be less than those anticipated from the proposed Project.

6.6 Summary of Alternatives to the Proposed Project

Project are considered and evaluated in this Draft EIR. To summarize these Project alternatives, as suggested in CEQA Section 15126.6(d), a matrix was prepared to summarize and compare the impacts of each Project alternative (see Table 6-3).

Table 6-3. Comparison of Project and Alternatives Impacts

Environmental Issue Area	Proposed Project	Alternative A - No Project/Existing Development	Alternative B - Reduced Development Alternative: Exclusion of PCC – North	Alternative C - Reduced Development: Reduce 1 Level from PCC-South and PCC-North
Aesthetics	LTS	▼	▼	▼
Air Quality:				
AQMP Consistency	SU	▼	▼	▼
Short-Term	LTS-MM	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Cultural Resources	LTS-MM	▼	—	—
Energy:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Geology and Soils	LTS-MM	▼	—	—
Greenhouse Gas Emissions:				
Short-Term	LTS	▼	▼	▼
Long-Term	LTS	▼	▼	▼
Hazards and Hazardous Materials:				
Short-Term	LTS-MM	▼	▼	—
Long-Term	LTS	▼	—	—
Hydrology and Water Quality:				
Short-Term	LTS	▼	▼	—
Long-Term	LTS	▼	—	—
Land Use and Planning	LTS	▲	—	—

I21-68

- Alternatives A and B all have reduced impacts in virtually every category which makes them a better possibility
- Disagree with the *Land Use and Planning* and *Transportation* for Alternatives having a greater impact for reasons already stated previously

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Table 6-4. Comparison of Alternatives – Meeting the Project Objectives

Does the Project Meet the Following Project Objectives?	Alternative A	Alternative B	Alternative C
Increase the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel, commercial, and residential land uses.	No	Yes	Yes
Reduce single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and the City's downtown.	No	Yes	Yes
How many project objectives are met?	0	6	7

Agree, the "no build" alternative is the way to go

6.7 Environmental Superior Alternative

An EIR must identify an "environmentally superior" alternative; and, where the no project alternative is environmentally superior, the EIR is then required to identify an alternative from among the others evaluated as environmentally superior (14 CCR 15126.6[e][2]).

As shown in Table 6-3, Alternative A would result in reduced environmental impacts to all environmental topics in the short-term because construction activity would not occur. Similarly, Alternative A would result in reduced environmental impacts to all environmental topics in the long-term, including elimination of the significant unavoidable impact related to conflicts with the AQMP, because no operational changes would occur. Although, no mitigation measures would be required for Alternative A, the two hotels would continue to be inconsistent with applicable zoning and land use regulations for the Project site. Under Alternative A, the Project site would remain in its existing condition and potential benefits of the proposed Project related to providing new living and working opportunities in close proximity to transit would not occur. Additionally, the proposed Project would redevelop surface parking lots and construct a mix of land uses including residential and commercial, which would help the City to achieve its goals and policies related to land use, circulation, economic development, and housing, which would not occur under Alternative A. Nevertheless, the elimination of all construction and operational impacts associated with the proposed Project would result in a more environmentally superior alternative when compared to the proposed Project, Alternative B, or Alternative C.

I21-69

As required under CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the "no project" alternative, the EIR must also identify an environmentally superior alternative among the other alternatives

Alternative B would reduce short-term construction-related impacts when compared to the proposed Project for all environmental topics. Alternative B would eliminate the necessity of MM-HAZ-2 since no development would occur at PCC-North. For long-term operational impacts, most environmental factors would have similar, albeit reduced, impacts under Alternative B to the proposed Project. Alternative B would have similar impacts to the proposed Project in the six areas: cultural resources, geology and soils, long-term hydrology and water quality, land use and planning, short-term transportation and tribal cultural resources. Alternative B would eliminate the significant unavoidable impact related to conflicts with the AQMP.

Alternative C would not eliminate any mitigation measures required under the proposed Project. Additionally, Alternative C would have similar impacts to the proposed Project in ten areas: cultural resources, geology and soils,

- Why did the City allow it in the first place? Can it be corrected without tagging on this **impactful** proposal to the **neighboring community?**

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6-36

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Response to Comment Letter I21

Matthew Klemp
April 1, 2021

I21-1 The commenter questions the applicability of assumptions and standards used in the EIR related to transit usage, walkability, parking, and traffic congestion, particularly at the intersection of Mariposa Avenue and Pacific Coast Highway.

For concerns regarding transit and walkability, see Response to Comment I21-29, which addresses these concerns in detail. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR. With regards to traffic congestion, increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA.

I21-2 The commenters states that Los Angeles does not have reliable transit, that current transit infrastructure has failed, and that the local population does not use transit. These assertions are not supported by any evidence and are in conflict with the overall intent of the applicable local and regional planning documents, including but not limited to: the Southern California Association of Governments (SCAG) Regional 2020/2045 Transportation Plan/Sustainable Communities Strategy (RTP/SCS) called "Connect SoCal", which is assessed in Section 4.9, Land Use and Planning of the Draft EIR, and the City's Climate Action Plan, which is assessed in Section 4.6, Greenhouse Gas Emissions of the Draft EIR. The proposed Project would support the goals and policies of these plans, as described in the Draft EIR sections mentioned.

I21-3 The comment states that key review areas of vehicular traffic from Mariposa Avenue to Downtown El Segundo, transit usage, and walkability have not been analyzed adequately.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This informational analysis includes an operational assessment of the Pacific Coast Highway/Mariposa Avenue intersection. Intersection improvements are proposed to the eastbound approach along Mariposa Avenue, which would improve levels of service (LOS) as well as vehicular queuing at this location during Project operations. These improvements are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios. A queuing analysis was conducted for the eastbound approach with and without the

Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1 in the Draft EIR.

Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, or required to assess any environmental impacts pursuant to CEQA.

I21-4 The comment suggests the Pacific Coast Highway (PCH) is a tunnel that may reflect Los Angeles Airport (LAX) aviation noise into the surrounding community. It also raises a question regarding the City of El Segundo's stance on LAX noise and expansion, and asserts noise will increase.

The commenter's assertion that LAX noise was not studied is not accurate. Section 4.10, Noise states that the Project site is outside of the 65 dBA CNEL aviation operation noise contour predicted in the report for 2020, and therefore would not expose workers or new occupants of the proposed Project residences or exterior uses to aviation overflight noise levels greater than 65 dBA CNEL, and impacts would be less than significant.

Further, the comment suggests that the PCH is a "tunnel" of tall buildings that are implied to produce echoes of LAX aviation traffic noise. Potential noise reflection from reflective building facades typically requires the receptor to be near the building facades—such as a listener on a highly trafficked urban roadway bounded by tall, densely-packed building facades.

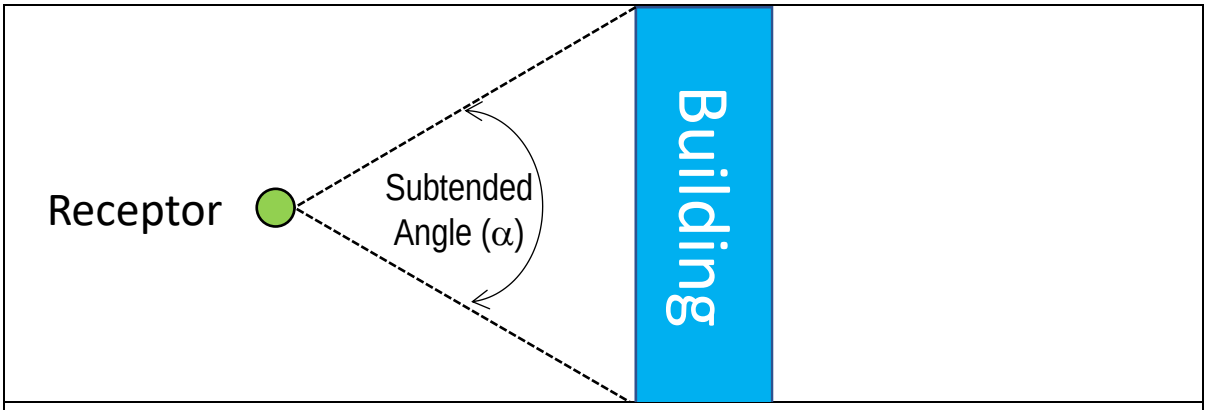
Noise from LAX aviation traffic associated with the nearest southern runways travels approximately 4,000 feet before reaching the Project vicinity, by which time it has attenuated with distance and other effects. This demonstrates why the Project vicinity is beyond the LAX aviation noise 65 dBA CNEL contour, as shown in Figure 4.10-2 of the Draft EIR. The diffuse noise from LAX aviation traffic impinging upon a proposed Project building façade would either be absorbed, diffracted, or reflected by its surface. But for a building façade that is porous (e.g., a parking garage), some sound would travel through the building unimpeded. The anticipated added sound contribution to an offsite receptor would depend on several variables that include its distance to the reflecting façade, the length of the façade, and the acoustical characteristics of the reflecting facade.

For an offsite receptor such as multi-family homes on the west side of Indiana Street, an introduced Project building façade across the street could present a surface that would reflect some LAX aviation traffic noise towards it. But the reflecting façade is not infinite in horizontal extent or height, nor would it be considered a perfect reflector, so the anticipated effect would be limited to no more than an ideal 3 dB increase of the LAX aviation noise contribution to the outdoor sound environment at this nearby receptor. This situation would be analogous to a receptor near a highway, where a noise barrier installed on the opposite side and parallel with the highway reflects the roadway noise towards the receptor and for which Caltrans expects would be a maximum 3 dB increase.[10] The proposed Project building façade surface would not be considered a perfect reflector, as it would feature some irregular geometries that would scatter or diffract sound, and the combination of window glazing and non-glazing elements would absorb noise that would then be re-transmitted to the building interior spaces.

[10] California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September 2013. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

As described in Section 4.10, Noise of the Draft EIR, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

Per the Caltrans Technical Noise Supplement, the maximum reflection from a nearby wall is 3 dB. The actual reflection available from this 3 dB maximum, based on receptor proximity to the façade, can be approximated much in the same way that actual noise reduction from a finite-length noise barrier is can be estimated as shown in Figure 18 from Chapter 5 of the Housing and Urban Development (HUD) Noise Assessment Guidelines.[11] In summary, the more distant a receptor is to a barrier, the smaller is the angle "alpha" subtended by the endpoints of the barrier with the receptor at the vertex.



Estimated Building Façade Reflection = 3 dB – 3*COS(α/2)

Likewise, for the multi-family receptors across Indiana Street from a proposed Project building having length that would make angle "alpha" equal to approximately 45 degrees, the anticipated reflection of the incoming sound would be less than a 0.23 dB increase of the directly-received sound source. Only if the receptor were very near the façade, so that angle "alpha" approaches 180 degrees, would the estimated reflection, before application of any façade surface effects, be very close to 3 dB.

For a much more distant receptor, such as a single-family home in the neighborhood west of Washington Park, and ignoring façade surface effects and any sound path occlusion from intervening structures between it and the Project building façades, the estimated reflection would be less than 0.01 dB for any angle "alpha" less than 9 degrees. Therefore, the proposed Project would not result in substantial increases of noise at adjacent sensitive receptors due to the reflection of aviation noise from the new building structures, and no mitigation is required.

If the City has, or has demonstrated, an intent or desire to control existing and future LAX noise by supporting or encouraging airport aviation traffic noise reduction at its source and corresponding noise emissions to the community, those effects would be distinct from what the City considers with respect to land uses under its jurisdiction that may be exposed to that LAX noise. In this instance, the City is considering the proposed Project, an introduction of mixed-use development, with respect to land use

[11] U.S. Department of Housing and Urban Development (HUD). 2009. HUD Noise Guidebook. Chapter 5 - Noise Assessment Guidelines. March. https://www.hudexchange.info/sites/onecpd/assets/File/Noise-Guidebook-Chapter-5.pdf.

noise compatibility and aims to protect new occupants from that existing LAX (and roadway traffic, among other sources) noise exposure that dominates the outdoor sound environment.

Thus, and for these above reasons, the expected LAX aviation noise increase due to proposed Project building reflection would be less than 3 dB, which is a less than perceptible difference and thus considered a less than significant impact. While this information regarding aviation noise effects has been added as part of this Final EIR, this additional information does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)). Operational noise impacts would remain less than significant.

I21-5 This comment states that while the Draft EIR concluded that no impacts would occur to parks, there are three parks within proximity to the Project site. The commenter expresses the following concerns related to the nearby parks: safety of park goers and changes in the demands for, and use of, the parks.

The topic of public services and recreation, including parks, is analyzed in Section 4.12 of the Draft EIR. The impact assessment includes an analysis of the potential for increased demands for parks and recreational facilities. Impacts to parks and recreational facilities are identified but were determined to be below a level of significance under CEQA. The topics of safety within the vicinity of the Project site, including pedestrian and bicycle safety, emergency access and evacuation, and traffic safety, have been addressed and evaluated in the Draft EIR pursuant to CEQA. Specifically, Section 4.13, Transportation discusses emergency access, roadway hazards, and bicycle and pedestrian facilities, including access and safety. Section 4.7, Hazards and Hazardous Materials discusses emergency response and evacuation. Impacts in these categories were determined to be less than significant. As such, the topics of park use and safety have been evaluated in the Draft EIR as required under CEQA. While impacts have been identified in these categories, they were determined to be less than significant.

I21-6 This comment states that the "reasonably foreseeable impacts" of traffic and noise were not evaluated and that the scope of the study is too narrow. This comment also notes that bypass or shortcut traffic analysis is not analyzed and that Washington Street is "completely ignored."

The topics of transportation and noise are both evaluated in the Draft EIR, and the evaluations have been conducted using applicable data and modeling programs, as well as a degree of specificity that is consistent with CEQA and industry standards. Significant impacts have been identified for the Project in both categories; however, feasible mitigation measures have been identified that would reduce effects to below a level of significance. Refer to Sections 4.10, Noise and 4.13, Transportation of the Draft EIR for details. Increased traffic and traffic congestion based on the level of service (LOS) metric/methodology are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This analysis goes beyond the requirements of CEQA.

Regarding the commenter's statements about bypass/shortcut traffic and Washington Street, a segment analysis for Washington Street and other nearby residential streets was not conducted for the

Draft EIR because the analysis of intersections operations at Mariposa Avenue and Pacific Coast Highway indicates that this intersection would accommodate Project traffic heading north onto Pacific Coast Highway, thus discouraging the use of nearby residential streets, such as Washington Street, for bypasses or shortcuts. Specifically, as shown in Appendix J-1 of the Draft EIR, pre-COVID traffic counts show 120 vehicles per hour (vph) turning left in the AM peak hour and 107 vph in the PM peak hour (approximately 2 vehicles per minute) from eastbound Mariposa Avenue to northbound Pacific Coast Highway (see Appendix A of Appendix J-1, *Peak Hour Traffic Volumes and Lane Configurations Existing (2019) Conditions*). The Project is projected to add 36 vph in the AM peak hour and 29 vph in the PM peak hour (approximately 1 vehicle every 2 minutes) to this movement (see Appendix A of Appendix J-1, *Peak Hour Traffic Volumes and Lane Configurations Project Only Assignment*).

The quantitative, informational analysis provided in Appendix J-1 shows that this intersection operates at LOS C under existing conditions (acceptable according to City standards) and LOS C/D under future base conditions (i.e., future conditions without the Project) (refer to Appendix J-1, Table 3A (*Existing Intersection Levels of Service Signalized Intersections*) and Table 7A (*Future Intersection Levels of Service Signalized Intersections*)). This intersection is also projected to operate at LOS C/D with the addition of the Project (refer to Appendix J-1, Table 6A (*Existing Plus Project Intersection Levels of Service Signalized Intersections*) and Table 8A (*Future Plus Project Intersection Levels of Service Signalized Intersections*)). Importantly, the intersection's operations would be improved with the Project, as an eastbound right-turn lane would be added to the intersection as a Project feature, as explained in Appendix J-1. The improvements in this intersection's operations are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios.

A queuing analysis was conducted for the eastbound approach with and without the Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1, in the Draft EIR. More specifically, the right-turn lane that would be constructed as part of the proposed Project at the Pacific Coast Highway/Mariposa Avenue intersection is forecasted to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project (i.e., no right-turn lane) to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane.

For these reasons, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue, since the Mariposa Avenue/Pacific Coast Highway intersection is expected to function well, particularly after the proposed Project improvement at this intersection. Even if 25% of the Project traffic desiring to travel north on Pacific Coast Highway were to use Washington Street to Maple Avenue or Walnut Avenue instead, the effect on Washington Street would be minor, with less than 5 cars every half hour on average during peak hours.

I21-7 This comment expresses concerns related to the calculations used in the EIR for the number of vehicles that would be associated with the Project. The standards used in the EIR to calculate Project-related vehicles are well cited and well researched and are based on industry standards. With respect to the Shared Parking Analysis (Draft EIR, Appendix J-2), the Project's residential component would be predominately (82%) studio and 1-bedroom units, which typically have fewer residents per unit and thus lower parking demand than the housing stock as a whole. Therefore, the parking study is based on parking demand per bedroom rather than per dwelling unit. The Institute of Transportation Engineers

(ITE) data (used for parking spaces per bedroom), a nationally recognized source, are from surveys in numerous states, including California, over the past few decades. Data from Palo Alto, California, is shown for comparison only and indicated less parking demand even in areas not well served by transit (and even less near CalTrain). Additionally, census data indicates less than 2 cars per dwelling unit for apartments in the City. As such, existing data supports a parking rate in El Segundo of less than 2 cars per dwelling unit. The City of Los Angeles uses parking metrics of 1 space per dwelling unit of less than 3 habitable rooms (typically a studio), 1.5 spaces per dwelling unit to 3 habitable rooms (typically a 1-bedroom unit), and 2 spaces per dwelling unit for more than 3 habitable rooms (typically a 2-bedroom unit). The proposed Project residential parking demand rates were estimated at 1 space per bedroom, based on the ITE data. The proposed Project would supply residential parking on the following rates: 1 space per studio, 1.5 spaces per 1-bedroom unit, 2 spaces per 2-bedroom unit, and 1/3 guest space per dwelling unit, similar to what is used in the City of Los Angeles and in line with the Census data of vehicle ownership in the City. The 0.5-space rate does not mean that half-sized spaces would be provided; rather, this indicates that the parking requirement for the 1-bedroom units was calculated assuming an average of 1.5 spaces per unit. (As such, some 1-bedroom units could support a single-car household, while others could support a two-car household.) The shared parking analysis (Draft EIR, Appendix J-2) shows that there would be sufficient parking for all uses that are part of the Project and therefore, overflow parking is not anticipated.

With respect to commenter's concerns about the traffic, noise, and safety analyses, Project traffic volume estimates (i.e., vehicular trips) are not based on the number of parking spaces in the parking study. Rather, the number of vehicles trips associated with the Project are based on ITE trip generation rates, which are industry standards that are widely used for transportation analyses. Therefore, the shared parking analysis and the parking rates have not affected estimates of the Project's vehicular trip generation or related analyses, such as noise.

Regarding the commenter's concerns for quality of life effects, see Response to Comment I21-12.

I21-8 The comment suggests that single-family homes to the west of the Project were "excluded" as studied receptors, and that the height of the Project buildings may introduce new noise sources (e.g., parking garage–related sounds) and may lead to LAX aviation noise reflection.

As noted on pages 4.10-5 and 4.10-6 of Section 4.10, Noise of the Draft EIR, "Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary), those receptors would be less impacted by noise and vibration levels than the above-listed sensitive receptors." As such, single-family homes were not excluded from the Draft EIR as noise-sensitive receptors; the nearest sensitive receptors are analyzed to provide the most conservative analysis. Nevertheless, additional information regarding noise impacts to the single-family residential neighborhood west of Washington Street has been added to this response, for informational purposes.

Off-site receptors closer to the proposed Project parking garage would likely experience the same types and magnitudes of low-speed automotive traffic and parking-related noises that are already present from the existing grade-level open parking lots currently on the Project site that are part of the existing outdoor ambient sound environment. The proposed Project parking garage may elevate the position of some of these sources to heights above the roofs of the multi-family homes along Indiana Street, so that the structures of these multi-family homes no longer occlude the direction sound paths from these

parking lot sources. But while intermittent sounds from the new Project parking garage may travel over the top of pre-existing multi-family residential buildings, this sound would be greatly attenuated by distance for the single-family residences. By way of example, a sound level at 50 feet from a parking garage source would be 20 dB less at a receptor 500 feet away, which is sufficient to reduce the new parking noise emissions to levels that would not be considered substantial increases to the exterior noise environment of the single-family home neighborhoods.

Potential perceptible (i.e., at least 3 dB) noise amplification due to sound-reflecting building facades is addressed in Response to I21-4.

Addition of the proposed buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the neighborhoods to the west, which is demonstrated in Table 4.10-6 of the Draft EIR. This table is emulated below as Table 2-5, and ST7, has been added. ST7 is a representative receptor on Washington Street (west side, mid-block between East Palm Avenue and East Elm Avenue) to demonstrate consideration of the single-family neighborhood west of Washington Park.

Table 2-5. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (west of Indiana Street)	59	56.1	59.5	55.5	-4
ST2 (northwestern Project boundary)	55	55.9	55.2	55.7	0.9
ST3 (eastern Project Boundary approximately 50 feet from PCH)	69.5	68.2	70.3	68.7	-1.6
ST4 (northeast corner of E. Mariposa Avenue and Illinois Court)	63	62.7	63.4	62.9	-0.5
ST5 (northern Project Boundary approximately 30 feet from E. Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6 and LT1 (eastern Project Boundary approximately 50 feet from PCH)	69.5	69.6	70.2	70.2	0.1
ST7 (west of Washington Street)[1]	54.5	54.6	55.2	55.1	0.1

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel

[1] Added assessment location—see Response to Comment I21-22 for a figure showing the location of ST7

As shown in the table above, the anticipated change in traffic noise level at ST7 is no greater than 0.1 dB, which is much less than a 3 dB change and hence a less than significant impact. This additional information that has been included herein does not require recirculation of the Draft EIR for public review, because it does not add a new significant impact, increase the severity of a previously identified impact, introduce a new alternative or mitigation measure, or indicate that the EIR was fundamentally inadequate and conclusory in nature (CEQA Guidelines Section 15088.5(a)).

I21-9 Issues raised in Response to Comment I21-9 are also raised in Response to Comment I21-7. As such, see Response to Comment I21-7.

I21-10 This comment raises four points of concern. The first point is that the number of vehicles estimated for the Project is underestimated and thus traffic would be an issue in the surrounding neighborhoods. The second point is that traffic would increase on Mariposa Avenue heading to and from Downtown El Segundo. The third point is that the Project would contribute to increased traffic in the neighborhood streets surrounding the Project site by Project vehicles bypassing congested intersections. Finally, the comment brings up concerns that the addition of the right-turn lane on Mariposa Avenue at Pacific Coast Highway would not be enough to alleviate the increased vehicle volumes associated with the Project.

Regarding the estimation of Project-generated vehicle trips, these estimates are based on ITE trip generation rates, which is a nationally recognized source. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. The vehicle traffic analyzed is for the AM and PM peak hours on weekdays. As such, Project traffic volume estimates are not based on the number of parking spaces in the parking study but rather are based on the ITE trip generation rates.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). This analysis addresses traffic on Mariposa Avenue heading to and from Downtown El Segundo. The traffic study estimates that the Project would add 16 vehicles during the AM peak hour and 20 vehicles during the PM peak hour along Mariposa Avenue (see Draft EIR, Appendix J-1). As such, traffic would increase to/from downtown along Mariposa Avenue; however, such increases would be relatively minor. Furthermore, automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

Regarding increased traffic on neighborhood streets, intersection congestion (particularly at Pacific Coast Highway and Mariposa Avenue), and the efficacy of the proposed Project intersection improvement at Pacific Coast Highway and Mariposa Avenue, please see Response to Comment I21-6. As stated in Response to Comment I21-6, the improvements in this intersection's operations are demonstrated through quantitative analysis provided in Appendix J-1. Specifically, the analysis shows that LOS at the Pacific Coast Highway/Mariposa Avenue intersection is better with the addition of the Project-related improvement than without, in both the "existing with Project" and "future with Project" traffic scenarios. A queuing analysis was conducted for the eastbound approach with and without the Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of Appendix J-1, in the Draft EIR. More specifically, the new right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane. Therefore, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue, since the Mariposa Avenue/Pacific Coast Highway intersection is expected to function well, particularly after the proposed Project improvement at this intersection.

I21-11 This comment states that high-density housing is impactful. The proposed Project, including its residential component, has been evaluated for environmental impacts under CEQA throughout the EIR. While some impacts on the environment have been identified in association with the proposed Project, almost all impacts can be mitigated to below a level of significance. (The one exception is an impact associated with consistency with the Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[12] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.) As such, while impacts would be associated with the Project (including its residential component), impacts have been disclosed to the public and decision makers and all direct physical impacts on the environment can be mitigated to levels less than significant.

I21-12 This comment consists of suggestions for alternative locations to the Project and states that alternate locations seem to be viable. The suggested alternate locations are as follows: (1) east of Pacific Coast Highway or south of Grand Avenue; and (2) standard-density housing across multiple areas, including east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area. The commenter suggests rezoning areas east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area to accommodate mixed-use residential land uses. The commenter also points out that approximately 75% of the City's land area does not have any residents.

Alternatives to the proposed Project, including alternate locations, are evaluated in Chapter 6 of the Draft EIR. Alternate locations to the proposed Project site were ultimately rejected as infeasible. The reasons for this conclusion are summarized below, followed by a description as to why the commenter's specific suggestions for alternate locations are determined to be infeasible.

Infeasibility of Alternate Locations

(1) Alternate locations would not avoid or reduce the Project's environmental impacts. As stated in Section 15126.6(f)(2)(A) of the CEQA Guidelines, the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that require mitigation. Rationale for this determination is provided in Section 6.4 of the Draft EIR.

(2) No known sites are available within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative, as defined in the CEQA Guidelines, is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The City evaluated the possibility for other sites, and this evaluation is summarized in Section 6.4 of the Draft EIR. The City determined that potential alternate locations were not suitable due to a variety of factors (land use designations, hazardous site conditions, and/or property ownership.)

[12] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Suggested Alternate Locations

The commenter's specific suggestions for alternate locations are addressed as follows:

- **East of Pacific Coast Highway or south of Grand Avenue.** The commenter suggests developing the proposed Project on the east side of Pacific Coast Highway and/or to the south of Grand Avenue. The commenter presents the option of rezoning a site on the east side of Pacific Coast Highway to accommodate mixed-use residential. As stated in Section 6.4 of the Draft EIR, development of the Project on another site along Pacific Coast Highway could provide a transition from the City's offices to the east and residential uses to the west, similar to the proposed Project site. However, other sites along Pacific Coast Highway were determined to be infeasible because no such sites are under control by the Project applicant, which is a factor for feasibility under CEQA. Additionally, other sites along Pacific Coast Highway may not be considered by the City to be appropriate for the increased height and density that is proposed for the Project. Furthermore, locating residential uses east of Pacific Coast Highway would place new residents farther away from services and amenities, such as parks, City Hall, the police station, and schools. This may result in increased vehicle trips within the City and/or increased development impacts, in the event that new public services and amenities need to be developed elsewhere in the City. Residents would also be required to cross Pacific Coast Highway to access public services, which could present increased traffic safety effects. The City did consider a parcel located near Pacific Coast Highway and Rosecrans Avenue, between The Point Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses. In general, the areas south of Grand Avenue are highly industrialized, and adding residences to this area would likely introduce an incompatible land use.
- **Smoky Hollow Specific Plan Area.** The commenter suggests use of the Smoky Hollow Specific Plan area as an alternate location for the proposed Project. The Smoky Hollow Specific Plan area extends east to west and is bounded by Indiana Street and Pacific Coast Highway to the east, downtown El Segundo to the west, and the Chevron oil refinery to the south. In response to shrinking manufacturing demand, declining investment, and parking issues, the City adopted the first Smoky Hollow Specific Plan in 1986. The updated Smoky Hollow Specific Plan (City of El Segundo 2018) sets a regulatory and planning framework that focuses development efforts on revitalizing buildings for incubator industrial and office space. Although the Smoky Hollow Specific Plan is intended to facilitate redevelopment, the land use regulations within the Smoky Hollow Specific Plan are focused on one- and two-story commercial and industrial development, the land parcels are small and land assemblage could be a major obstacle, and would generally be incompatible with the Project's residential uses. Moreover, according to Table 2-1, Allowed Land Uses Table, of the Smoky Hollow Specific Plan, only "caretaker units" are permitted as accessory uses within the Specific Plan boundaries. Additionally, slightly greater air quality, land use, and transportation (vehicle miles traveled) impacts could occur if the proposed Project was developed within the Smoky Hollow Specific Plan area. For example, the proposed site is just over 0.5 miles from the Metro C Line Mariposa Station, whereas most areas within the Smoky Hollow Specific Plan area are farther away from a Metro C Line station, thereby reducing potential access to regional transit for the Project's 618 future residents. For

these reasons, use of the Smoky Hollow Specific Plan area as an alternate Project location was rejected as infeasible.

- **Standard-Density Housing in Multiple Areas.** The commenter suggests building housing in multiple areas by rezoning property to the east of Pacific Coast Highway and/or in the Smoky Hollow Specific Plan area in order to spread out new housing and associated impacts. Use of areas to the east of Pacific Coast Highway and use of the Smoky Hollow Specific Plan area as alternate locations for the proposed Project were rejected as infeasible for the reasons described above. Additionally, using more land area to develop the proposed Project would increase environmental impacts in many categories. Use of additional land area, which would be required for reduced density development, would increase grading and ground disturbance during construction, which would likely lead to increased air quality impacts and greenhouse gas emissions. Construction traffic would affect more roadways within the City and construction noise would affect additional sensitive receptors. The potential to affect cultural resources during ground disturbing activities could increase, as would the potential for biological resources to be encountered and disturbed. The demands on public services and utilities within the City would be similar and may even increase, in the event that the dispersed housing allowed for larger dwelling unit sizes and/or more landscaped areas per unit. Vehicular trip generation would be the same or similar, and while the added vehicles may be spread out, similar thoroughfares that are used by many residents in the area may be similarly affected, since the total number of vehicles being added to the roadway network would not change. Furthermore, the applicant would need to control multiple, dispersed sites throughout the areas east of Pacific Coast Highway and/or within Smoky Hollow, and these properties would also need to be suitable for residential development. The applicant does not have control of any such properties that would allow for the dispersal of the proposed Project across larger land areas. For these reasons, development of the proposed Project across multiple areas is not considered feasible.

  In support of their third suggestion ("standard-density housing in multiple areas"), the commenter states that the proposed Project would be "forcing a few people to bear the brunt of reasonably foreseeable impacts" and provides the examples of lower quality of life and devaluing of property. The commenter suggests that spreading out the proposed housing could alleviate these concerns.

  While quality of life is not a topic that is specifically addressed under CEQA, effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[13] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). Economic effects such as property values are not discussed in the EIR, since these are not issues related to environmental impacts under CEQA. (See CEQA

[13] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

Guidelines, Section 15131.) However, the commenter's concerns regarding property values and quality of life and their suggestions for, and support of, alternative locations will be provided to decision makers for their review and consideration as part of this Final EIR.

I21-13 The commenter notes that COVID-19 prevented the study/EIR from verifying the data in field. The transportation impact analysis for the proposed Project includes operational analysis of 12 intersections included in the traffic study area. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). The AM and PM peak hour traffic counts at these intersections were collected in 2019 during the months of May and October. The COVID-19 shelter at home restrictions were imposed in March 2020 and therefore did not affect the field data collected for the traffic analysis of study area intersections. The existing conditions described for roadways, transit, bike, and pedestrian facilities were verified using most recent data and documents available, including Google Earth imagery.

Please see the response to I21-22 that provides a summary of measured samples of the existing outdoor ambient sound environment in the vicinity of the Project. These measurements were performed in May 2021, and the collected data was used to compare with previous estimates and to verify the appropriateness and accuracy of traffic noise modeling presented in the Draft EIR.

I21-14 The commenter states that the Project objective of improving the jobs/housing balance, contributing to a response to the regional housing shortage, and supporting existing businesses in the area could be achieved through building the Project in an alternate location. Specifically, the commenter suggests that building the Project south of Grand or east of Sepulveda Boulevard would alleviate effects on residents near the proposed Project site. The commenter also states that telecommuting allows many people to work from any location and that the largest employer in the area (LAX) employs people who already live in close proximity.

As described in Response to Comment I21-12, alternate locations for the proposed Project to the south of Grand Avenue and/or east of Sepulveda Boulevard (i.e., Pacific Coast Highway) have been rejected as infeasible. (Note that Sepulveda Boulevard becomes Pacific Coast Highway south of LAX.) At a different location in the City, the proposed Project would still achieve the objective that the commenter cites (improving the jobs/housing balance, providing housing, and supporting existing businesses in the area). However, alternate locations were rejected as infeasible for more reasons than consistency with only the Project objectives, such as property ownership, land use compatibility, land use designations, and failure to avoid or lessen the Project's significant effects.

The commenter further states that the Project's objective of reducing single-occupancy vehicle use by providing a mix of land uses in walkable proximity to the Metro C Line and City's Downtown is "not a reality." The commenter lists several concerns related to this objective: no study was done of current residents' use of transit; well-established mass transit has not worked in the Los Angeles area; downtown is not within walking distance of the Project site; reliance on walking to justify dense housing is not realistic; and, the infrastructure and widespread adoption of transit use is not in place to support this objective.

For concerns regarding transit and walkability, see Responses to Comments I18-4 and I18-5. These responses specifically address concerns regarding the distance between the proposed Project site and nearby transit facilities, with respect to walkability. Regarding the Project's proximity to downtown El Segundo, the distance is approximately 1.5 miles, which equates to an approximately 30-minute walk. While the potential for walking to downtown is mentioned in the EIR and is set forth as part of one of the Project objectives, the analysis in the EIR is not based on the potential for future Project residents to walk to downtown El Segundo. Rather, as explained in Response to Comment I18-4, a conservative trip credit for alternative transport modes was taken for the purposes of the Project's vehicle trip calculations. The trip credit is minimal (5% of the Project's total vehicle trips) and is based on the mixed-use nature of the Project and Project area, combined with proximity to transit.

The EIR evaluates the environmental impacts of the proposed Project based on the existing conditions of the Project site and area; applicable standards that are in place at the local, regional, state, and national levels; and, conservative assumptions based on default data from similar project types. While the availability of transit and the mixed-use nature of the Project and its surroundings may present a potential environmental benefit and are features discussed in the EIR, the environmental conclusions in the EIR do not hinge upon widespread use of alternative transport modes amongst the future residents, employees, guests, and visitors of the proposed Project. Rather, the analysis assumes that a majority of the future residents, employees, guests, and visitors would use single-occupancy vehicles. Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, or required to assess any environmental impacts pursuant to CEQA.

It is ultimately the decision of the City's elected officials to approve or deny the proposed Project. CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits. As such, Project approval would likely be based on a variety of considerations, not just the potential walkability of the Project. Rather, walkability and reduced use of single-occupancy vehicles would be considered a potential benefit amongst several, to be weighed against the Project's impacts.

I21-15 The comment suggests that there would be a permanent increase in noise due to the Project and lists human activity, population growth, high density, and roadway traffic noise as potential noise-related concerns.

Permanent increases in noise associated with the proposed Project are addressed pursuant to CEQA in Section 4.10, Noise of the Draft EIR. The analysis therein considers increased roadway traffic noise associated with the Project, as well as noise from outdoor uses associated with the Project (e.g., pools, outdoor amenities, and mechanical equipment). Operational (i.e., permanent) noise impacts were determined to be less than significant. Roadway traffic noise increases attributed to the Project have been assessed in the Draft EIR, and Response to Comment to I21-8 includes a reproduced version of Table 4.10-6 from the Draft EIR (identified as Table 2-5 in this section), which includes consideration of an additional representative receptor, ST7, within the single-family residential neighborhoods west of Washington Park that are over 500 feet west of the Project site. While some outdoor areas near the Project are expected to experience an increase in outdoor ambient noise where it is already dominated by roadway traffic, the increases are expected to be less than significant, as demonstrated in the Draft EIR.

Regarding the commenter's statements about alternative sites south of Grand Avenue or east of Pacific Coast Highway, refer to Responses to Comments I21-12 and I21-31. As described above, the proposed Project would not result in significant traffic noise impacts to existing residents. As such, no potentially significant traffic noise impacts have been identified requiring the identification of mitigation measures or alternatives to avoid or reduce the impact pursuant to CEQA.

Regarding the commenter's graphical depiction of the high-density nature of the proposed Project, the graphic compares the density of two-story, multi-family residential units located approximately 0.75 miles north of the Project site to the density of the proposed Project. This density comparison does not pertain to the adequacy of the environmental analysis in the EIR. For a response to concerns regarding the Project's density, refer to Response to Comment I21-11.

I21-16 This comment features a "LAX Noise Pollution Propagation" diagram, which illustrates a concern regarding potential aviation traffic noise reflecting upon three structures that include the proposed PCC North building. The rendering in the comment suggests that aircraft noise from LAX traffic would beam directly towards PCC North and then would reflect west towards existing neighborhoods. Please refer to Response to Comment I21-4 related to potential noise reflection from proposed Project buildings.

I21-17 This comment states that the Project's impacts with respect to unplanned population growth should be considered substantial. The commenter further states that high-density housing is impactful to a community and region that has never had this type of development. The commenter states that the infrastructure to support "this drastic change" is not yet available and the population has not given up vehicles. The commenter suggests that spreading out housing would make more sense and would put new residents closer to transit.

The proposed Project's impacts related to population and housing are evaluated in Section 4.11 of the Draft EIR. Impacts in the category of population and housing are identified; however, impacts were determined to be below a level of significance, based on the substantiation and evidence provide in Section 4.11. Under CEQA, a population growth impact occurs when a project would induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). In order to determine whether the Project would induce substantial unplanned population growth, the number of residents, households, and employees that may be generated by the Project were estimated and then compared to growth forecasts for the City and region. As described in Section 4.11, the number of housing units that would be developed as part of the proposed Project would not exceed projections for housing growth within the City, as set forth by SCAG in the 2020–2045 RTP/SCS. The proposed Project's 263 new residential units would assist the City in meeting the mandated RHNA allocation and would be consistent with and supportive of the City's 2021-2029 Housing Element projections for new residential units within the City. As such, the number of housing units associated with the proposed Project would fall within growth projections and would assist the City in meeting state mandates for the provision of new housing.

As further described in Section 4.11, the proposed Project would accommodate an expected 618 residents, which would exceed SCAG population growth forecasts for the City. However, as demonstrated in the City's General Plan growth projections, the City anticipated more robust residential growth than was able to be realized. The proposed Project would thus fulfill prior population projections that were formulated when the City's General Plan was written. Furthermore, the proposed Project

would support SCAG's goals and strategies for growth in the region, as detailed in Sections 4.9 and 4.11 of the Draft EIR. Because the proposed Project would support SCAG's goals and strategies, and because the proposed Project would assist the development of new housing that would improve the City's job/housing balance, impacts related to population growth were determined to be less than significant. Although the proposed Project would provide a resident population that exceeds SCAG's projections, this growth is not considered substantial and it would further attainment of local and regional goals. For these reasons, and as further detailed throughout Section 4.11 of the Draft EIR, the proposed Project's population growth was determined to be less than significant, based on the thresholds established under CEQA.

Regarding availability of infrastructure, the proposed Project's potential effects on utilities, service systems, and public services are evaluated in Sections 4.12 and 4.15 of the Draft EIR. No significant impacts were identified, which indicates that the proposed Project would not require new off-site infrastructure or substantial expansions to existing infrastructure. Moreover, the Project applicant would pay all applicable development impact fees pursuant to Chapter 27A of the El Segundo Municipal Code. Concerns regarding the availability and use of transit are addressed in Responses to Comments I18-4, I18-5, and I21-14. The commenter's suggestion to develop the proposed Project across a larger area of land is addressed in Response to Comment I21-12. As stated therein, spreading the proposed housing units across a larger area of land would increase environmental impacts in multiple categories. Furthermore, spreading new housing units across a larger area of land in the City would be expected to place some residents further away from transit services.

I21-18 This comment describes the parks that are within proximity to the Project site that states that the EIR's determination that the Project would not impact parks requires additional explanation. The comment further states that traffic would impact the nearby parks and could be a safety hazard.

The topic of public services and recreation, including parks, is analyzed in Section 4.12 of the Draft EIR. As discussed in Section 4.12, the significance criteria used to evaluate impacts to recreation and parks are based on Appendix G of the CEQA Guidelines. Under CEQA, impacts to recreation would occur if a project would result in physical deterioration of a recreational facility due to increased use of recreational facilities; if the construction or expansion of recreational facilities associated with the Project would result in an adverse physical effect on the environment; or if a project were to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities (including parks), the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

The proposed Project was evaluated using these significance criteria to determine whether a potentially significant impact to parks and recreation could occur. The Draft EIR analysis concluded that the additional residents associated with the proposed Project would likely use the nearby public parks and recreation facilities. However, based on the City's current ratio of residents to park acreage and the number of new residents associated with the proposed Project, the analysis determined that the proposed Project would not cause an exceedance in the existing standards of service for parks. Additionally, the El Segundo Recreation and Parks Department was contacted as part of the data gathering for the EIR. The department indicated that no new/expanded public parks or recreational facilities would be required as part of the proposed Project. Further, the Project would include common open space areas, including rooftop pools and community rooms. These on-site amenities would

provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities. Finally, the Project applicant would pay all applicable development impact fees pursuant to Chapter 27A of the El Segundo Municipal Code. For these reasons and as further demonstrated in Section 4.12 of the Draft EIR, the Project's impacts to parks and recreational facilities were determined to be less than significant. For concerns regarding traffic-related safety and nearby parks, see Response to Comment I21-5.

I21-19 This comment states that Alternative B would be a viable alternative. The commenter notes that some of the Project objectives would not be met but that it would lessen the overall impact to the community. City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative B). As such, the commenter's support for Alternative B will be included in this Final EIR for review and consideration by decision makers.

I21-20 This comment outlines the topics to be addressed in the forthcoming portions of the commenter's letter. Please refer to Responses I21-21 through I21-31, below.

I21-21 It is assumed that these comments refer to single-family home neighborhoods west of Washington Park. Please refer to Response to Comment I21-16. While the Draft EIR noted that such noise-sensitive receptors are over 500 feet from the Project site boundary, a representative receptor "ST7" has been added to the roadway traffic noise assessment and appears in the reproduced Table 4.10-6 (identified as Table 2-5 herein) appearing in Response to Comment I21-8. Increases in roadway traffic noise at this newly considered representative receptor show that the neighborhood west of Washington Park would be expected to experience a less than significant traffic noise impact for both sets of modeled with-Project scenarios.

I21-22 The comment makes remarks with respect to traffic in the Project vicinity, and includes an observation implying that existing outdoor ambient sound levels were not measured. As the Draft EIR notes, such existing outdoor noise levels were estimated at the time of the Draft EIR preparation because of COVID-19 response conditions that were in place and likely suppressed otherwise typical roadway traffic flows and volumes.

However, as COVID-19 response conditions have relaxed or otherwise resulted in an apparent return-to-normalcy setting for the existing sound environment in the vicinity of the Project at the time of the preparation of this Final EIR, short-duration (approximately 15 minutes each) investigator-attended sound pressure level (SPL) measurements were performed during daytime hours on May 18, 2021 and are summarized in the following table, with approximate measurement locations appearing in the subsequent map figure. An unattended long-duration SPL monitor was also deployed and collected successive five-minute duration SPL interval data that are displayed in Figure N-2 following the SPL survey location map (Figure N-1). Consistent with expectations, the plot of L_{eq} values at LT1 rises and falls with varying levels of roadway traffic on Pacific Coast Highway over the course of the sampled diurnal cycle from May 18-19, 2021.

This collected measurement data, appearing in Table 2-6 and Figure N-2, was used to check estimates of existing noise levels in support of the traffic noise modeling effort. For example, the measured L_{eq} value of 58.9 dBA at ST1 during the indicated late-afternoon sample period primarily represents acoustic contribution from outdoor sound sources such as nearby and distant traffic from a variety of

vicinity roadways. The modeled 59 dBA CNEL shown in Table 2-5 for "Existing (2019)" noise level at this location very closely agrees with this measured L_{eq} daytime sample, and is consistent with expectations. As exemplified by the long-term (24-hour) measurement sample plot in Figure N-2, traffic noise L_{eq} at night would be less than the L_{eq} during the day and would tend to offset the CNEL-related upward decibel adjustments during the nighttime period, thus resulting in daytime L_{eq} being comparable to the calculated CNEL value. Aside from the introduction of a new receptor "ST7" to represent the more distant single-family residential community west of Washington Park, the presented predicted traffic noise levels for the modeled scenarios shown in the new Table 2-5 (see response to I21-8) are the same as those presented in the Draft EIR.

Table 2-6. Measured Existing Outdoor Ambient Sound Pressure Levels (SPL) in Project Vicinity

Measurement Location Tag and Summarized Description	Date (mm/dd/yy) and Approx. Start Time (hh:mm) to End Time (hh:mm)	L_{eq} (dBA)	L_{max} (dBA)	L_{min} (dBA)	L_{90} (dBA)
ST1 (west of Indiana Street)	05/18/21 15:59 to 16:14	58.9	68.7	54.2	55.3
ST2 (northwestern Project boundary)	05/18/21 17:53 to 18:08	64.3	83.4	55.3	55.9
ST3 (eastern Project Boundary approximately 50 feet from PCH)	05/18/21 16:21 to 16:36	78.0	86.6	61.4	69.0
ST4 (northeast corner of E. Mariposa Avenue and Illinois Court)	05/18/21 17:35 to 17:50	63.9	82.0	54.0	56.3
ST5 (northern Project Boundary approximately 30 feet from E. Palm Avenue)	05/18/21 17:12 to 17:27	64.0	90.0	53.7	55.3
ST6 and LT1 (eastern Project Boundary approximately 50 feet from PCH)	05/18/21 16:52 to 17:06	76.7	89.5	58.6	66.6
ST7 (west of Washington Street)	05/18/21 15:04 to 15:19	61.1	72.5	55.0	55.9

dBA = A-weighted decibel; Leq = energy-equivalent sound level; Lmax = maximum measured sound level; Lmin = minimum measured sound level; L90 = sound level exceeded ninety percent (90%) of the cumulative intervals during the measurement period

The comment also inquires if traffic noise was modeled on "Mariposa and back streets." The reproduced Table 2-5 includes both ST4 and newly added ST7, which are the same measurement locations appearing in the above data table.

Figure N-1: Project Vicinity in El Segundo, California, with displayed approximate outdoor sound pressure level (SPL) survey locations

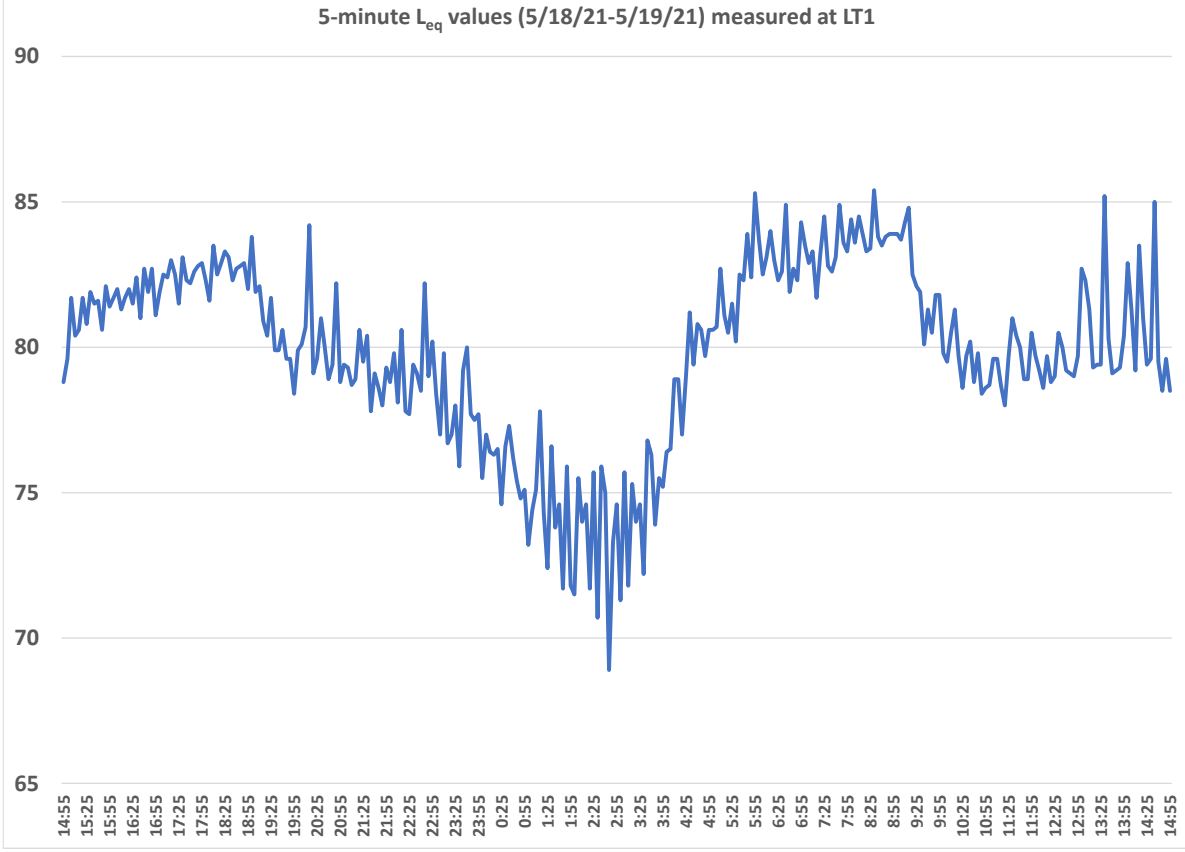


Figure N-2: Plot of successive 5-minute A-weighted L_{eq} intervals measured and recorded at field survey position LT1 (see preceding map illustration [Figure N-1] for location)

I21-23 The comment refers to sampled City of El Segundo General Plan content shown on Page 4.10-9 of the Draft EIR. Pages 4.10-16 through 4.10-19 of the Draft EIR present and discuss potential exterior noise intrusion to future residents anticipated due to the Project. For existing off-site receptors, please refer to Response to Comments I21-8 and I21-22, above.

I21-24 The comment observes that the property lines of nearest multi-family residences to the west of the Project are "as close as 15 feet to the PCC North" and suggests the planned Project parking garage will have "significant impact on Illinois Ct. residences." These residences are currently exposed to low-speed vehicle traffic on existing parking lots occupying the area of PCC North and unobstructed bi-directional roadway traffic on Pacific Coast Highway. The planned structures of PCC North would eliminate much of the former (leaving only the portion of the existing parking lot north of E. Mariposa to become a gated private drive and thus remain a low-volume, low-speed vehicle area) and substantially obstruct the latter, which is anticipated to contribute to an overall net noise-reducing benefit for existing multi-family residences on Illinois Court, as the traffic noise prediction results for ST4 in Draft EIR Table 4.10-6 (and in the Response to Comment I21-8) also indicates.

I21-25 Please see Response to I21-22, which includes both added consideration of ST7, a representative receptor for the single-family home neighborhood west of Washington Park, and a report of newly-

collected outdoor ambient SPL data at the now seven representative assessment locations. As indicated in the response to I21-13, the collected samples of existing outdoor sound level were used to help validate the existing scenario for the traffic noise modeling effort and its results presented in the Draft EIR.

Regarding the commenter's statements about Project-related trip generation, see Response to Comment I21-7.

I21-26 Cumulative off-site traffic noise has been evaluated in Section 4.10.5 of the Draft EIR. This analysis references a quantitative assessment of off-site traffic noise and concludes that noise level increases of less than 3 dBA would occur along the studied sample roadways in the vicinity of the Project under the cumulative scenario. As such, the anticipated increases would be below significance thresholds (as further discussed in Section 4.10, Noise in the Draft EIR). As such, the EIR has addressed cumulative off-site traffic noise and demonstrates that impacts would be below a level of significance.

Regarding the commenter's concerns for property values and quality of life, these are not topics that are specifically addressed under CEQA. Refer to Response to Comment I21-12, which addresses the topics of quality of life and property values.

I21-27 The issues raised in this comment were also raised in Response to Comments I21-6, I21-7 and I21-10. Refer to Responses to Comments I21-6 and I21-10.

I21-28 Many of the issues raised in this comment were raised in Comments I21-6 and I21-10. Please see Responses to Comments I21-6 and I21-10.

This comment also points out that there are no Project-generated vehicles assigned to use the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections, as depicted in the transportation study (Draft EIR, Appendix J-1). The commenter expresses concerns that this trip assignment is not accurate.

The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). The informational transportation analysis assigns 0 trips to the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections because the analysis (Draft EIR, Section 4.13 and Appendix J-1) shows that the intersection of Pacific Coast Highway/Mariposa Avenue operates at LOS C under existing conditions (acceptable according to City standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a Project feature. This right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with the Project and the right-turn lane. Therefore, the Draft EIR estimated that Project traffic going north on Pacific Coast Highway would use Mariposa Avenue and, as such, no turning vehicles were assigned to the Pacific Coast Highway/Maple Avenue and Pacific Coast Highway/Walnut Avenue intersections.

This comment also points out that 9 vehicles were assigned to use the Pacific Coast Highway/Palm Avenue intersection during the AM peak hour. This comment also infers that 9 vehicles using Pacific Coast Highway and Palm Avenue seems low compared to the 252 parking spaces that would be provided at PCC North. The vehicular trip estimates associated with the Project are based on ITE trip generation rates, which is a nationally recognized source. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. The vehicle traffic analyzed is for the AM and PM peak hours and not based on the number of parking spaces provided. Based on these rates, PCC North is projected to generate 48 trips during the AM peak hour. Of these trips, most were assumed to use Mariposa Avenue and Pacific Coast Highway. The limited assignment of Project trips to the Palm Avenue at Pacific Coast Highway is intentional, due to the difficulty of making an eastbound left-turn across Pacific Coast Highway at this stop-controlled intersection.

I21-29 This comment states that the traffic study does not reflect the congestion in the area. However, the traffic conditions described and shown the Draft EIR are based on empirical data collected in the Project area prior to the COVID-19 pandemic. See Section 4.13.1 of the Draft EIR and Appendix J-1. As such, the existing traffic conditions in the Project area are accurately reflected in the Draft EIR's transportation analysis.

This comment questions the methodology in which the number of vehicle trips generated by the Project was determined. This comment states that the Project-generated vehicle trips are determined by the Shared Parking Analysis. This is not correct; the Project traffic estimates are not based on the number of parking spaces but rather on standard ITE trip generation rates. These rates are calculated by surveying the number of vehicle trips to and from a variety of locations for a certain land use. ITE reports a trip generation rate that relates the number of vehicle trips to a characteristic of the land use, such as dwelling units or square footage. Please see the Response to Comment I21-30 for more detail regarding the parking analysis.

This comment also states that the analysis overestimates transit use and walking and that no survey was done of local residents regarding transit use or walking. This comment also points out that Downtown El Segundo is not a walkable distance from the Project site.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. However, U.S. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. As such, data collected in the Project area indicates that the assumptions in the EIR analysis for use of alternative transportation modes are conservative in nature and that the EIR assumes reduced use of alternative transportation modes relative to current rates of use in the surrounding community. While the EIR describes the transit-oriented nature of the proposed Project and its proximity to existing businesses and services, the quantitative analyses (e.g., traffic generation, traffic-related noise generation) remain conservative with respect to vehicle use versus alternative transportation use. Furthermore, no additional walk/bike/transit trip generation credit was taken in the Draft EIR for the Project's proximity to Downtown El Segundo.

The comment also states that there is a lack of reliable transit in the Los Angeles area. However, the Metro C Line Mariposa Station is 0.51-mile from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 also run along Pacific Coast Highway with stops

near the Project site. Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR). The distance between the Project site and the Mariposa Station equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours. Nevertheless, as described above, the trip credits taken in the EIR analysis for transit use are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Regarding the commenter's question about studying the transit and walking habits of current residents, such an analysis is not required to assess the proposed Project's consistency with local and regional planning documents or policies, as stated in Response to Comment I21-2, and is also not required to assess any environmental impacts pursuant to CEQA. As described above, the assumptions used in the EIR are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Furthermore, the Project site is adjacent to a transit-priority area, which is an area delineated by SCAG to identify locations where transit use is practical and where transit-oriented development is encouraged. Plans and policies are in place at the local, regional, and state level to encourage increased use of alternative modes of transportation and to support mixed-used and higher density housing near transit. The proposed Project is supportive of these policies, as it would locate higher density housing and mixed-use development in proximity to transit. As these plans and policies are carried out, the use of alternative modes of transportation is also expected to increase over time, particularly in urbanized areas.

Please see Responses to Comments I21-6 and I21-10 regarding the Pacific Coast Highway and Mariposa intersection and residential streets.

I21-30 This comment provides an extensive review of the Shared Parking Analysis (Appendix J-2 of the Draft EIR). Responses to points raised in the comment are provided below:

- For concerns regarding transit in the Los Angeles area, see Response to Comment I21-29, above.
- The ITE data (used for parking spaces per bedroom in Table 1), a nationally recognized source, are from surveys in numerous states, including California, over the past few decades. They are not specific to New York or Chicago. Although Table 1 in the Shared Parking Analysis showed the whole range of parking rates provided by ITE for multifamily apartments, only the data in the final row of the table (general urban/suburban not within 0.5 mile of rail transit) was used in this study.
- The Palo Alto data is shown for comparison purposes only and indicates less parking demand even in areas that are not well served by transit.
- Two parking spaces per dwelling unit is the current code parking requirement in the City, as described in Table 2 of the Shared Parking Analysis. A Los Angeles standard for parking spaces does not actually exist; the City of Los Angeles, for example, uses 1 space per dwelling unit of less than 3 habitable rooms (typically a studio), 1.5 spaces per dwelling unit of 3 habitable rooms (typically a 1-bedroom unit), and 2 spaces per dwelling unit of more than 3 habitable

rooms (typically a 2-bedroom unit). Census data indicates less than 2 cars per dwelling unit for apartments in the City.

- Project traffic volume estimates used in the transportation analysis (Draft EIR, Section 4.13 and Appendix J-1) are not based on the number of parking spaces in the parking study but rather are based on ITE trip generation rates. The number of parking spaces shown in the shared parking analysis does not affect the trip generation or trip distribution shown in the traffic analysis.
- While ITE rates may not be customized for the Los Angeles area, the Project is predominately (82%) studio and 1-bedroom units, which typically have fewer people living in each unit and lower parking demand than the housing stock as a whole. Therefore, the parking analysis considered sources for parking demand per bedroom rather than per dwelling unit. To be conservative, the per bedroom rate for the General Urban/Suburban not within 0.5 mile of rail transit is used. The Palo Alto data is shown as a point of comparison. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. For more details regarding transit in the Project area and a response to the commenter's concerns about the transit use of the existing community, refer to Response to Comment I21-29, above.
- The half space in the "1.5 space per unit" rate used for the 1-bedroom apartments does not mean that half-sized spaces would be provided. Rather, this indicates that the parking requirement for the 1-bedroom units was calculated assuming an average of 1.5 spaces per unit. For example, these 1-bedroom units could be occupied by a single person with 1 vehicle or by a couple with 2 vehicles, which would average to 1.5 vehicles per unit.
- Overnight hotel parking counts were conducted on a Saturday night. Since the surveys were done overnight (when hotel demand is highest) at 2 AM, they were technically done early Sunday morning. Regarding seasonality, the hotels were 75% and 76% occupied on the nights of the surveys. Therefore, the rates were factored up to represent 100% occupancy when the hotel parking demands were estimated.
- The retail and restaurant parking demand numbers shown on Table 11 in the Shared Parking Analysis are from the shared parking spreadsheets shown in Appendix B of the Shared Parking Analysis.
- The assigned parking for residents is not part of the shared pool of parking and therefore would not be shared with the hotels and commercial uses. The shared parking analysis shows that there would be a deficit of 21 spaces at the South Site at 10 PM, which can be accommodated at the Fairfield parking structure or PCC North (combined surplus of 27 spaces). The comment brings up the concern that individuals would need to walk to another structure to park their vehicles. The hotel would provide valet parking so guests would not have to walk to another structure to park their vehicles.

I21-31 This comment presents comments/concerns related to a number of topics: (1) suggestions for alternatives to the proposed Project; (2) concerns regarding the proposed Project, based on the Project's objectives; and (3) comments regarding the alternatives analysis in the Draft EIR. These topics are addressed as follows:

Suggested Alternatives

The commenter mentions the following suggested alternatives in this comment: alternative locations east of Sepulveda Boulevard (i.e., Pacific Coast Highway) and south of Grand Avenue; and, lower-

density housing in multiple areas, involving rezoning areas east of Pacific Coast Highway and within the Smoky Hollow Specific Plan area. Refer to Response to Comment I21-12 for responses to these suggested alternatives.

The commenter further states that an estimated 99% of City residents live in 25% of the City's land area. The commenter presents a diagram outlining the residential area of the City, with arrows pointing to non-residential areas, to depict the concept of developing residential land uses in areas of the City that are not currently used for that purpose. For the reasons enumerated in Response to Comment I21-12, dispersing the proposed Project across a larger area of land and constructing the proposed housing at a lower density would increase environmental impacts in multiple categories. Furthermore, the City is generally built out under current conditions. As such, building residences throughout areas of the City that are currently commercial or industrial in character would require redevelopment. While some of the City's industrial areas are currently being contemplated for redevelopment (e.g., the Smoky Hollow Specific Plan area), such areas may not be suitable for residential land uses, due to contamination concerns and/or land use incompatibility with industrial uses that may still be operational. Additionally, the non-residential areas are not well-served by existing public services and facilities, including schools and parks that are currently located within the existing residential areas of the City. Therefore, constructing new public services and amenities farther from existing residential areas to accommodate dispersed residential developments within commercial/industrial areas of the City could increase environmental impacts. Nevertheless, the commenter's suggestion to spread out residential land uses within the currently nonresidential areas of the City will be included in this Final EIR for review and consideration by decision makers.

Comments on Project Objectives

This comment presents concerns regarding the proposed Project's objectives. The commenter states that the Project's objective of creating additional housing will adversely impact neighboring residents and states that the proposed Project will not mitigate negative impacts to neighbors, such as traffic, safety (higher traffic adjacent to neighborhood parks), parking, noise, population growth (crowding of more activity in a smaller area), decreased teacher-to-student ratio, lower quality of life, lower home values, and increased congestion and neighborhood traffic. These concerns and topics are addressed in other responses herein. For concerns regarding neighborhood impacts, see Response to Comment I18-1. For concerns regarding traffic in neighborhoods, see Responses to Comments I6-3, I18-3, and I21-6. For concerns regarding traffic near local parks, see Response to Comment I21-5. For concerns regarding parking in neighborhoods, see Responses to Comments I6-2 and I18-2. For concerns regarding neighborhood noise, see Response to Comment I21-8. For concerns reading population growth, see Response to Comment I21-17. For concerns regarding quality of life, see Response to Comment I21-12. For concerns regarding home values, see Response to Comment I7-1.

Regarding the commenter's concerns about decreased teacher-to-student ratios, Section 4.12 of the Draft EIR addresses the Project's effects to schools. The analysis therein demonstrates that the proposed Project would not adversely affect local schools. Furthermore, communication with El Segundo Unified School District (conducted as part of the data gathering process for the EIR) indicates that existing schools are sufficient to accommodate increases in students associated with the Project.

The commenter also references a prior comment (categorized herein as Comment I21-14). Refer to Response to Comment I21-14 for a response to concerns expressed therein.

Alternatives Analysis

The commenter states that the Smoky Hollow Specific Plan area, which is among the alternative locations that were rejected as infeasible in the EIR, should not have been rejected due to the area's distance from transit. The commenter further states that the Smoky Hollow Specific Plan area appears to be more equidistant between the downtown El Segundo area and transit.

Proximity to transit is important for reducing environmental impacts such as VMT. As such, locating the Project site further from a Metro C line station could increase environmental impacts in some categories. (Most sites within the Smoky Hollow Specific Plan area would be situated further from a Metro station than the proposed Project site). Furthermore, alternative sites within the Smoky Hollow Specific Plan area were rejected for a variety of reasons (not solely on the basis of transit proximity); see Response to Comment I21-12.

The commenter further states that development elsewhere along Pacific Coast Highway was ruled out because the Project applicant does not control another site in this area. The commenter suggests that the City should find a different applicant who does control another property elsewhere along Pacific Coast Highway. Under CEQA, an alternative site can be rejected on the basis of applicant ownership. With respect to the feasibility of potential alternatives to a project, CEQA Guidelines Section 15126.6(t)(l) states the following: among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries … and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site. As such, rejection of an alternate location for a Project on the basis of property ownership is allowable under CEQA.

The commenter also states that an alternate location east of Sepulveda Boulevard / Pacific Coast Highway and/or within the Smoky Hollow Specific Plan area would reduce impacts; however, the EIR states that impacts would not be reduced at these alternative locations.

The commenter does not present substantial evidence that the impacts of the proposed Project would be reduced at an alternate location. As stated in Section 6.4 of the Draft EIR, development of the proposed Project on an alternate site would result in a similar construction scenario, similar quantities of criteria air pollutant emissions during construction, similar levels of construction noise, and similar levels of energy consumption. Due to the generally built-out nature of the City, it is likely that demolition of existing buildings and paved areas would be required at an alternate location. Additionally, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the City, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen the air quality and noise impacts of the proposed Project during construction. Similarly, development at an alternate site would not necessarily reduce impacts to transportation and traffic. Regardless of its location, the proposed Project would generally place similar demands on public services, utilities and services systems, and energy resources. With regard to the visibility and appearance of the Project, the aesthetic impact of the Project is largely related to its height and density, which would not substantially change at an alternative location. For these reasons, placing the Project at an alternative location would not be expected to reduce its impacts.

The comment notes that Alternatives A and B have reduced impacts in most categories, which would make them "a better possibility." The commenter also notes disagreement with the EIR's determination

that impacts in the categories of Land Use and Planning and Transportation would increase for these alternatives.

City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternatives A or B). As such, the commenter's support of Alternatives A and B will be included in this Final EIR for review and consideration by decision makers. Those alternatives' impacts in the categories of Land Use and Planning and Transportation are substantiated in Sections 6.5.1 and 6.5.2 of the Draft EIR.

The comment concludes by expressing support for the "no project alternative" (Alternative A), which is identified in the Draft EIR as the environmentally superior alternative. As stated above, City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative A). As such, the commenter's support for Alternative A will be included in this Final EIR for review and consideration by decision makers.

I21-32 This comment consists of cover letter. This comment is introductory in nature, and no specific comments are raised regarding the environmental analysis in the EIR. No response is necessary.

I21-33 This comment is the same as I21-2; refer to Response to Comment I21-2.

I21-34 This comment is the same as I21-3; refer to Response to Comment I21-3.

I21-35 This comment raises the same concerns as I21-4; refer to Response to Comment I21-4.

I21-36 This comment is the same as I21-5; refer to Response to Comment I21-5.

I21-37 This comment is the same as I21-6; refer to Response to Comment I21-6.

I21-38 This comment is the same as I21-7; refer to Response to Comment I21-7.

I21-39 This comment is the same as I21-8; refer to Response to Comment I21-8.

I21-40 This comment is the same as I21-9; refer to Response to Comment I21-9.

I21-41 This comment is the same as I21-10; refer to Response to Comment I21-10.

I21-42 This comment is the same as I21-11; refer to Response to Comment I21-11.

I21-43 This comment raises the same concerns as I21-12; refer to Response to Comment I21-12.

I21-44 This comment is the same as I21-13; refer to Response to Comment I21-13.

I21-45 This comment is the same as I21-14; refer to Response to Comment I21-14.

I21-46 This comment is the same as I21-15; refer to Response to Comment I21-15.

I21-47 This comment is the same as I21-16; refer to Response to Comment I21-16.

I21-48 This comment raises the same concerns as I21-17; refer to Response to Comment I21-17.

I21-49 This comment is the same as I21-18; refer to Response to Comment I21-18.

I21-50 This comment is the same as I21-19; refer to Response to Comment I21-19.

I21-51 This comment is the same as I21-26, and disagrees with the Draft EIR finding that cumulative off-site traffic noise impacts would be less than significant, and remarks that property values and quality of life would be lowered "even if the traffic was silent."

As indicated on page 4.10-22 of Section 4.10, Noise of the Draft EIR, the traffic noise analysis already considered future-year (2025) scenarios that include estimates of cumulative roadway traffic volumes and thus inclusion of other projects in the vicinity. The predicted traffic noise changes, as shown in Table 4.10-6 of the Draft EIR and reproduced in the response to I21-8, are either reductions or increases that are considered less than significant.

I21-52 This comment is expressed as part of I21-21; refer to Response to Comment I21-21.

I21-53 The first portion of this comment is the same as I21-22; refer to Response to Comment I21-22. The second portion of this comment is expressed as part of I21-21; refer to Response to Comment I21-21. The third portion of this comment is expressed as part of I21-23; refer to Response to Comment I21-23.

I21-54 This comment is expressed as part of I21-23; refer to Response to Comment I21-23.

I21-55 This comment is the same as I21-24; refer to Response to Comment I21-24.

I21-56 This comment raises the same concerns as I21-25; refer to Response to Comment I21-25. This comment additionally states that the scope of the noise modeling location is "too tight" and does not address neighboring areas. As shown in the response to I21-8, a new offsite receptor, ST7, was added to the traffic noise modeling to represent the single-family home community west of Washington Park. As shown, impacts would be less than significant.

I21-57 This comment is the same as I21-26; refer to Response to Comment I21-26.

I21-58 This comment is the same as I21-27; refer to Response to Comment I21-27.

I21-59 This comment is the same as I21-29; refer to Response to Comment I21-29.

I21-60 In this comment, the commenter has highlighted existing AM and PM peak hour traffic volumes at the Pacific Coast Highway/Maple Avenue, Pacific Coast Highway/Mariposa Avenue, and Pacific Coast Highway/Palm Avenue intersections on a figure from the EIR. However, no comments are raised regarding the environmental analysis in the EIR. No response is required.

I21-61 The commenter expresses concern regarding estimation of Project traffic at the study area intersections and elaborates that the traffic congestion and delays at the Pacific Coast Highway/Mariposa Avenue cause drivers to use alternate streets instead of Mariposa Avenue.

Refer to Responses to Comments I21-6, I21-10, and I21-28 for responses to these concerns.

I21-62 A portion of this comment is expressed as part of I21-29 and I21-30; refer to Responses to Comments I21-29 and I21-30.

I21-63 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-64 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-65 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-66 This comment references a prior comment (categorized herein as Comment I21-14). Refer to Response to Comment I21-14.

I21-67 This comment is expressed as part of I21-31; refer to Response to Comment I21-31. This comment additionally lists impacts that the commenter states would be reduced by an alternate project location: traffic, safety (such as more traffic near parks), parking, noise, population growth, reduced teacher-to-student ratios, lower quality of life, and reduced home values.

The commenter speculates that an alternate location would reduce impacts in the categories listed above. No substantial evidence is provided in support of the commenter's contentions. Constructing the Project elsewhere in the City would be expected to result in similar traffic impacts at different locations throughout the City. Additionally, effects at major thoroughfares (e.g., Pacific Coast Highway and intersections along Pacific Coast Highway) that are used by many City residents may remain the same. As explained in Response to Comment I21-31, because of the City's urban nature, mix of land uses, and the presence of a variety of sensitive receptors throughout the areas of the City that would be suitable for residential development, it is unlikely that an alternate site would be situated far enough from sensitive receptors to substantially lessen impacts on sensitive receptors, such as noise impacts. Regarding population growth and effects to schools, the Project would lead to the same amount of growth and the same student generation regardless of its location in the City. Quality of life and home values are not topics addressed under CEQA. However, due to the largely built-out nature of the City, and the industrialized nature of large portions of the City, it is likely that a suitable alternate location would also be situated near other residential areas.

I21-68 This comment is expressed as part of I21-31; refer to Response to Comment I21-31.

I21-69 This comment is expressed as part of I21-31; refer to Response to Comment I21-31. This comment additionally includes a question regarding the non-conforming nature of the two hotels that currently exist on the Project site. The commenter asks why the City allowed non-conforming uses and asks whether this can be corrected without the proposed Project and its associated effects.

The comment regarding non-conforming uses does not pertain to the adequacy of the environmental analysis in the EIR; no response is required. However, for informational purposes, it is noted that the existing hotels are permitted uses in the current zoning (C-3). As such, the existing use itself is not non-conforming, but the hotel buildings are non-conforming with regard to height. The buildings exceed the current height limit. The proposed Specific Plan would bring the hotel buildings into conformance with the zoning standards for height.

Comment Letter I22

From: venugopal joshi [redacted]
Sent: Monday, April 5, 2021 1:15 AM
To: Samaras, Paul; Planning
Subject: Comments for Draft EIR for Pacific Coast Commons
Attachments: Appendix1_El Segundo Profile - Mapping L.A. - Los Angeles Times.pdf; Appendix2_1_LAX Airfield and Terminal Modernization Project DEIR_page2.pdf; Appendix2_2_LAX Airfield and Terminal Modernization Project DEIR_page17-18.pdf; Appendix3_Hotels in El Segundo _ El Segundo Hospitality and Tourism.pdf; Appendix4_CityOfElSegundo-SmokyHollow-EIR.jpg; Appendix5_El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze.Oct30_2018.pdf; Comments to DEIR for PCC.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Please find attached. Kindly acknowledge receipt of this email

I22-1

Thanks
Joshi

Venu Joshi
605 Washington Street,
El Segundo – 90245.

April 4, 2021

Via: Email to psamaras@elsegundo.org and planning@elsegundo.org

To:
Paul Samaras, Planning Department
City of El Segundo,
350, Main Street
El Segundo - 90245

Re: Public Comments for Pacific Coast Commons Specific Plan Draft Environmental Impact Report

Dear Mr. Samaras and The Planning Department,

I22-2

Please accept the following comments on the Pacific Coast Commons ("PCC") Specific Plan Draft Environmental Impact Report ("DEIR"). These comments are submitted on my behalf, a resident of El Segundo and being directly impacted by the proposed project. This include attachments and reports from publicly available documents.

The proposed construction of the 6-story mixed-use apartment building (total 263 units) with maximum height of 90ft. The DEIR seems to have willfully neglected impact to key areas and specifically around my street (600 Block of Washington Street).

This project under the guise of development of underutilized land and affordable housing would cause a major impact to the residents in the immediate neighborhood and the City of El Segundo in general. While we should recognize providing more housing opportunities and land development, we should be cognizant of the character of the city, which is "Mayberry by the Sea" and refuse to allow any super high density residential construction and move towards building low-density apartments/single/multifamily homes across the city.

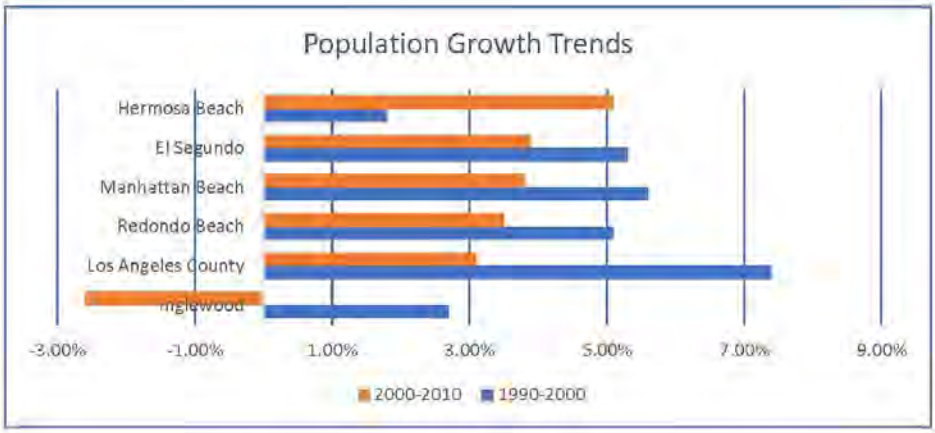
I22-2 Cont.

The following are the various areas that DEIR fails to properly report the short term and the long term impact.

- **Density**: The DEIR fails to explore options that can reduce the density to alleviate the impact of packing a lot of residents in a small area. Alternatives to spread the development in a larger area and around El Segundo, weren't sufficiently considered. Smoky Hollow and East of PCH as additional areas of residential development weren't studied. El Segundo Residential Housing zone exists only in the northwest quadrant of the city (~25% of area). Rest of the area is occupied by Chevron and Commercial Developments. From https://maps.latimes.com/neighborhoods/neighborhood/el-segundo/ (attached : Appendix 1) El Segundo is indeed #199 in 272 neighborhoods in Los Angeles. However, if we consider only ~25% of the residential land area, then our density is far bigger than our neighboring cities (we can jump to the top #65 of 272). Adding more density to this area is not the right approach.

I22-3

The population growth trends (2010 census) indicates we are in line with our sister cities (like Manhattan Beach and Redondo Beach).



I22-3 Cont.

Figure 1: Population Growth Trends

- **Not-In-My-Backyard:** I am all in favor of development of my underutilized 'backyard' and vacant lands in my city, without any doubt. But this type of high-density residential development doesn't bode well for our city. We recently submitted a 116-page comments (and exhibits over several hundred pages) to strongly oppose the development of LAX Airfield and Terminal Modernization Project DEIR in our backyard (Attached: Appendix 2). So, it would be more than logical to oppose the same occurring anywhere in our city. We should be able to fend off as being obstructionist and nimby by the proponents of these developments by offering valid and rational reasoning for such opposition.

I22-4

- **Economic Development Element:** Building more retail on the underutilized surface parking lots in along the PCH would be a great solution and generate more jobs/revenue to the city. However, we should not be blinded by the revenue aspect to change the commercial/hotel zone into a high-density residential zone. Since Los Angeles is hosting the 2028 Summer Olympics and Paralympic Games, we would be needing more hotel rooms for this and future events. We should study the benefit of building a new hotel along East and West of PCH.

I22-5

We have 2600 hotel rooms in El Segundo today (Attached; Appendix: 3), but with large events occurring in the future, we may need more otherwise, this revenue would go to other South Bay Cities or to other areas of Los Angeles County.

I22-5 Cont.

- **Land Use Element:** There are swaths of vacant and underutilized lands in El Segundo. The zoning of these lands could be changed to build low density apartment complexes to aid in 2021-2029 Regional Housing Needs Assessment that commits building 492 new units during this period. Additionally, the Smokey Hollow area could be rezoned into a mixed-use for office/retail/residential (retail/office on the lower floor and residential on the higher floor). The DEIR for Smokey Hollow (2018: Attached: Appendix 4) should be revisited as alternative solution for increasing the availability of housing. We should also consider building residential housing East of PCH for the thousands of office/commercial employees working in this quadrant of the city. In the past, there was opposition to housing East of PCH (News report: 2018 Attached: Appendix 5) including some due to the property tax portion not reaching the El Segundo School District but to Wiseburn School District. These can be re-negotiated to provide equitable and fair share of the property tax collection to both the school districts. A recent example of such collaboration is the "City of El Segundo Wiseburn Unified School District Aquatics Center".

I22-6

- **Circulation and Arterial Road Element:** The EIR completely ignores traffic on Washington Street and Mariposa Avenue while reporting that there is no impact, which is grossly incorrect. The go-around-the-block traffic for PCC North will need to traverse through Washington Street as the adjoining street Illinois Ct. (Cul-de-sac) is not a through street. The Grand Avenue/Holly Ave street will also be clogged by the new high-density traffic. The assumption that building an extra right-lane on Mariposa going south to solve all the traffic problems is a gross misrepresentation, since it ignores the other surrounding streets (Palm/maple) which may need additional lanes to handle the new traffic. Some portion of the DEIR study was done during the pandemic without adjusting for increased numbers pre-pandemic (COVID-19) and pent-up demand that would occur post pandemic.

I22-7

- **Open Space and Recreational Element:** The new development lacks any recreational facility for its residents and will lead to strain on the existing City Parks and Recreational Facilities. The DEIR reports no significant impact to the nearby parks which is highly misrepresented, including the main Rec Park on Sheldon Street (with limited Tennis/Volleyball/Basketball courts that we currently have). I22-8

- **Air Quality Element:** The DEIR neglects and underrepresents the air quality deterioration of the nearby environments when 267 residentials units and several retail spaces bring in cars and their emissions in a small confined area. I22-9

- **Noise Element:** The DEIR underplays the permanent increase in the noise to the surroundings blocks due to the new development. Additional noise intensification due to the new 90 feet and 85 feet buildings bouncing the airport noise back into the adjacent neighborhood, wasn't correctly studied and reported. I22-10

- **Parking:** Insufficient guidelines were used for build parking for the new development. The DEIR assumes that new residents will be highly favoring public transportation, which is factually incorrect. It is wrongly implied that most of affordable housing residents do not own a car and uses public transportation. The public transportation in Los Angeles is severely limited, the DEIR relies on other cities with highly developed public transportation (like Bay Area etc.,) to justify the lack of sufficient parking spots. The DEIR fails to note that on special events when the hotel is at full capacity the residence parking would be limited and would overflow into the surrounding neighborhood, exacerbating a worsening parking situation. The proposal to introduce permit parking program to newer streets like Indiana Street is forcing unnecessary and unwanted hassle on the current residents of these streets. Again, there is no mention of Washington Street as an impacted street, while listing Illinois Ct., which is cul-de-sac and not a through street, already having very limited free parking spaces. Expansion of the permit parking program should be entirely avoided by building sufficient parking in any new retail/residential developments. The overflowing parking from this new development would cause inconvenience to visitors to Freedom Park, Washington Park and Constitution Park and would incur a massive drop in active users of these very fine parks. I22-11

- **Public Safety Element:** The DEIR doesn't properly document the impact to public safety element and need for additional city staff (fire/police/paramedics etc.,) to handle almost 1000 additional residents in these 267 dwelling units and the several retail spaces. I22-12

Conclusion:

For the reasons set forth above, I respectfully request that no further consideration be given to the proposed project without incorporating these comments and is fully compliant. I22-13

I thank you for the opportunity to comment on the DEIR.

Very truly yours,

Venu Joshi
605 Washington Street
El Segundo, CA-90245

Appendix

Appendix 1 : Los Angeles Times Neighborhood report

Appendix 2 : El Segundo Comments for LAX Airfield and Terminal Modernization Project

DEIR_page 2, 17 and 18.

Appendix 3 : Hotel Rooms in El Segundo (destinationelsegundo.com)

Appendix 4 : 2018 DEIR for Smokey Hollow

Appendix 5 : Housing east of PCH (Daily Breeze 2018)

4/4/2021 El Segundo Profile - Mapping L.A. - Los Angeles Times

- Member Center
- Alerts & Newsletters
- Jobs
- Cars
- Real Estate
- Rentals
- Weekly Circulars
- Local Directory
- Place Ad

Los Angeles Times

Local

- HOME
- LOCAL
  - L.A. Now
  - Politics
  - Crime
  - Education
  - O.C.
  - Westside
  - Neighborhoods
  - Environment
  - Data & Maps
  - Local Plus
- U.S.
  - Politics
  - Nation Now
  - Politics Now
  - Top of the Ticket
  - Science
  - Science Now
  - Obituaries
- World
  - World Now
  - Afghanistan war
  - Africa
  - Americas
  - Asia
  - Europe
  - Middle East
- Business
  - Money & Co.
  - Technology
  - Autos
  - Highway 1
  - Company Town
  - Personal Finance
  - Jobs
  - Real Estate
  - Business Plus
- Sports
  - Sports Now
  - Lakers
  - Clippers
  - Dodgers
  - Angels
  - NFL
  - Kings
  - NHL/Ducks
  - USC
  - UCLA
  - Preps
  - Scores
- Entertainment
  - Awards: The Envelope

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I22-14

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- Movies
- TV
- Music
- Celebrity
- Arts & Culture
- Industry
- Critics' Picks
- Entertainment Plus

- Health
  - Science Now
  - Medicine
  - Fitness & Nutrition
  - Mental Health
  - Healthcare
  - Mind & Body
  - Health Plus
- Style
  - Home
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  - California Cookbook
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  - Books
  - L.A. Affairs
  - Comics
  - Reader photos
  - Living Plus
- Travel
  - California
  - Mexico
  - Hawaii
  - Las Vegas
  - Europe
  - Asia
  - Australia
  - Travel & Deal Blog
  - Travel Plus
- Opinion
  - Editorials
  - Op-Ed
  - Letters
  - Opinion L.A.
  - Top of the Ticket
  - Readers' Rep
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MAPPING L.A. > SOUTH BAY

El Segundo

PROFILE CRIME SCHOOLS COMMENTS

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I22-14
Cont.

Sections: Population Ethnicity Income Education Age Housing Families Military Ancestry

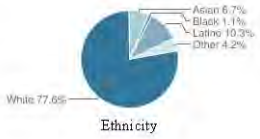
Source: Census 2000, SCAG, Los Angeles Department of City Planning

Population

- **15,970** population in 2000, according to the U.S. Census
- **5.46** square miles
- **2,925** people per square mile, **among the lowest densities** for **South Bay** and **among the lowest densities** for the county

Ethnicity

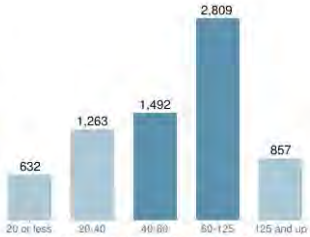
- The percentage of **white** people is high for the county.
- **Not especially diverse** for **South Bay** and **not especially diverse** for the county



Ethnicity

Income

- **$83,925** median household income (2008 dollars), **about average** for **South Bay** but **high** for the county
- In Los Angeles County, **Mission Hills**, **Arcadia** and **Elizabeth Lake** have the most similar household incomes.
- The percentages of households that earn **$60,000 to $125,000** and **$40,000 to $60,000** are high for the county.



Household income in thousands of 2000 dollars

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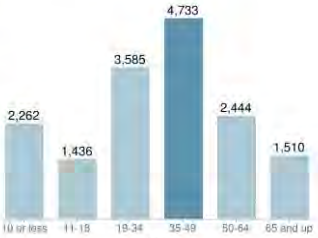
Education

- **40.8%** of residents 25 and older have a four-year degree, **about average** for **South Bay** but **high** for the county
- In Los Angeles County, **Rowland Heights**, **Northridge** and **Palms** have the nearest percentage of residents 25 and older with a four-year degree.
- The percentages of residents 25 and older with **some college education**, **a bachelor's degree** and **a master's degree or higher** are high for the county.

Education level

Age

- The median age is **36**, **about average** for **South Bay** and **about average** for the county
- In Los Angeles County, **Alhambra**, **Del Rey** and **Eagle Rock** have similar median ages.
- The percentage of residents ages **35 to 49** is among the county's highest.



Age

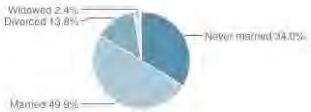
Housing

- Average household size of **2.3** people, **low** for **South Bay** and **low** for the county
- **Gardena**, **Hancock Park** and **Lynwood** have the most similar percentage of homeowners in Los Angeles County.

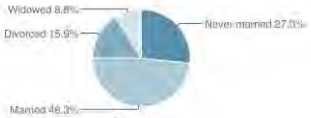
Occupied housing units

Families

- The percentages of **divorced males** and **divorced females** are among the county's highest.
- There are **512** families headed by single parents. The rate is **13.0%**, **about average** for **South Bay** and **about average** for the county



Males



Females

Military

- There are **1,406** veterans, or **11.4%** of the population, **high** for **South Bay** and **high** for the county overall

I22-14
Cont.

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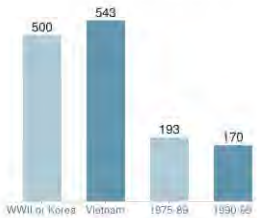
- The percentages of veterans who served during Vietnam and 1990-99 are among the county's highest.



Ancestry and immigration

- **German** (13.5%) and **Irish** (11.5%) are the most common ancestries.
- **1,973** (12.4%) of residents are foreign born, low for South Bay and low for the county. **Canada** (12.4%) and **India** (9.2%) are the most common foreign places of birth.

El Segundo is a city in the South Bay region of Los Angeles County.

The neighboring communities are Del Aire, Hawthorne, Manhattan Beach, Playa del Rey, and Westchester.

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- Arlington Heights

CRIME RANKINGS

VIOLENT CRIME

1. Chesterfield Square
2. Vermont Vista
3. Vermont Knolls
4. Harvard Park
5. Broadway-Manchester

PROPERTY CRIME

1. Elysian Park
2. Fairfax
3. Beverly Grove
4. Playa Vista
5. Rancho Park

About This Project

El Segundo is one of the 272 neighborhoods in Mapping L.A., The Times' resource for crime, neighborhoods, demographics and schools.

More about Mapping L.A. »

About The Data Desk

This page was created by the Data Desk, a team of reporters and Web developers in downtown L.A.

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I22-14
Cont.

taking any action on the proposed Project.

The ATMP will add a new Terminal 9 and a new Concourse 0, together containing up to twenty-nine new "contact" gates for passenger loading. These new facilities would create substantial noise, transportation, and air pollution impacts affecting El Segundo residents, who already deal with the impacts from one of the busiest airports in the world. The DEIR also includes a variety of safety and "efficiency" improvements on the north and south airfields, including lengthened and reconfigured taxiways. Despite these airfield improvements, the Project does not provide for the lengthening of any north airfield runways or further separate the current runways on the north side. Thus, the Project would exacerbate the existing operations imbalance between the north and south airfields, which places the impacts of the bulk of operations—involving the largest, heaviest, noisiest, and dirtiest aircraft—on El Segundo's residents, thereby sparing City of Los Angeles residents such impacts.

The Project also includes major roadway demolition and reconstruction, including a consolidation of eastern access to the Central Terminal Area ("CTA") from Century Boulevard, and direct vehicle access to the proposed Terminal 9 curbside area from Sepulveda Boulevard. Considered together with ongoing construction from other current and future LAX projects, the ATMP would subject residents of El Segundo and nearby communities to nearly a decade of intense construction activity. In addition, the expansion would exacerbate a growing problem of travelers and LAX workers using and parking on El Segundo streets. This letter explains the legal inadequacies of the DEIR under the California Environmental Quality Act ("CEQA"), Public Resources Code section 21000 et seq. As we explain below, the DEIR is woefully deficient in numerous respects, and must be substantially revised and recirculated before decisionmakers can consider the Project.[2]

I22-15

It is important to note that El Segundo is mindful of the fact that it entered into a 2017 settlement agreement with LAWA regarding the LAX Landside Access

[2] We appreciate that LAWA responded to El Segundo's request for an extension of the 45-day deadline for public comment on the DEIR, ultimately extending the comment due date to March 15, 2021 from December 14, 2020. LAWA unnecessarily made the process of commenting on the DEIR more difficult, however, by rejecting El Segundo's request for an "unlocked" copy of the DEIR such that text may be copied and pasted into commenters' written comments. LAWA's "policy" not to unlock EIRs that are circulated for public comment makes the public's right to comment more difficult, particularly when dealing with a document of this DEIR's size and density.

II. The DEIR Is Fatally Flawed Due to Its Failure to Analyze Project Impacts Beyond the Aspirational Buildout Year of 2028.

Unlike in previous EIRs for airport expansion projects, in which LAWA has claimed that the project would have no effect on passenger/operational capacity and thus the project would effectively have no operational impacts, here LAWA has taken a new, but still troubling, approach. Once again, LAWA claims that passenger/operational capacity would be essentially unaffected by any of the Project's improvements, and future demand/capacity with the Project would be the same as future demand/capacity without the Project. DEIR at pp. 6-4 and 6-5; *see generally* DEIR, Appendix B.1. In prior EIRs, LAWA used this reasoning to justify concluding that projects' impacts were less than significant or nonexistent. Here, however, for all impacts that LAWA concludes would be significant and unavoidable in the Project completion year (2028) even if the Project were not built—i.e., for impacts which LAWA claims are not the direct or even indirect result of the Project, but would occur anyway—LAWA nonetheless concludes that these impacts are significant and unavoidable *Project* impacts. Effectively, LAWA is hedging its bets that the BOAC, and the City of Los Angeles, will approve this much-touted, long anticipated Project regardless of its impact on the environment and communities surrounding the airport, which for decades have shouldered the burden of LAX's negative externalities. I22-15

As explained in the following pages, however, LAWA would be wrong to assume this approach is a prophylactic against a CEQA challenge. First, as a general matter, CEQA requires lead agencies to use "best efforts" to estimate all "reasonably foreseeable" impacts. CEQA Guidelines §§ 15144, 15064(d). Second, LAWA's claim that the Project would have no effect on LAX's passenger/operational capacity is undercut by the forecast data included in the DEIR. Third, it is simply common sense that the Project would expand LAX's operational capacity. Fourth, the DEIR is part of a sustained pattern and practice of thwarting CEQA's requirements by claiming that the Project will have no effect on aviation growth, and therefore no impacts associated with growth. Fifth, the DEIR lacks evidence for its claims that the airport without the Project could accommodate the same operations/year as with the Project in 2028, 2033 and 2045. Each of these is a reason that the DEIR's analysis is fatally flawed and is independent of the others, and thus a separate ground for finding the analysis legally inadequate.

A. CEQA Requires Lead Agencies to Use "Best Efforts" to Estimate All "Reasonably Foreseeable" Impacts.

While the DEIR analyzes impacts for the Project completion year of 2028, except

in limited instances discussed in the relevant impact discussions below, the document does not analyze impacts beyond 2028. Thus, even though the Project represents an enormous, unprecedented expansion of the airport, including for the first time putting passenger facilities on the east side of Sepulveda Boulevard (18 new passenger gates at the proposed new Terminal 9), the DEIR analyzes the Project's impacts only until the aspirational Project buildout year. In effect, the DEIR just focuses on construction impacts for this huge Project, and ignores the fact that the Project will be a permanent capital improvement to the airport, with added capacity for daily operations continuing indefinitely into the future. The DEIR rationalizes this approach by claiming, through its aviation growth forecast, that operations would be the same with or without the Project, yet the DEIR lacks evidence for this claim and in fact shows that the Project would enable LAX to continue operating at capacity for longer than if the Project were not built. LAWA therefore has not justified truncating its CEQA analysis at the Project buildout year and ignoring the noise, air quality, greenhouse gas ("GHG") and other impacts of the Project's operations.

LAWA cannot claim that analyzing operational impacts out to 2045 would be "speculative" because here no speculation is required: LAWA has provided detailed forecasts of anticipated passenger and aircraft operations out to 2045, 17 years beyond the aspirational buildout year and 26 years beyond the baseline year. DEIR, Appendices B.1 and B.2. The DEIR provides no rationale for concluding that impacts in 2028 would be significant and unavoidable based on forecasted future operations through 2045, while failing to make significance conclusions for impacts beyond 2028. As El Segundo's expert consultants note in their attached reports, LAWA's approach here of truncating its analysis of the Project's operational impacts to a buildout year less than 10 years away is not the norm, especially given the size and scope of the Project. Specifically, it is "surpris[ing] that the future analysis study year is only 10 years from the baseline year (2028), whereas many large projects include study years which are 20 years in the future so as to avoid a future year too close to the current year once the project is implemented." Svinth Report at p. 3 (noting that the EIR for San Jose International Airport's 2017 Master Plan analyzed noise impacts 20 years into the future). *See also* Kanafani Report at p. 2 ("The DEIR fails to assess the effect of the improvements on traffic growth and on the resulting environmental impact of this growth.").

CEQA requires lead agencies to use "best efforts" to estimate all "reasonably foreseeable" impacts. CEQA Guidelines §§ 15144, 15064(d). Because LAWA claims to know the level of passengers/operations at LAX each year through 2045, and has used these growth forecasts to evaluate the Project's impacts in 2028, the DEIR violates this

I22-15
Cont.

Hotels in El Segundo

Find a place to call home during your Southern California visit.

Whether you're traveling for work or enjoying a weekend getaway, the hotels of El Segundo offer more than just a comfortable place to rest your head. With more than 2,600 rooms in a variety of new and beautifully renovated hotels, there's certainly no shortage of accommodations options. You'll find that in El Segundo it really is possible to have it all: a convenient location, budget-friendly prices and plenty of local amenities.

If you're visiting the area for business, skip the usual airport-adjacent hotels and book your room in El Segundo instead. Just a short drive from Los Angeles International Airport (LAX), El Segundo feels like a world away with its well-appointed hotel rooms, trendy shops and friendly vibe. An easy commute gets you anywhere you need to go, so you'll be able to breeze through your work-day without wasting time in traffic. Once you're done for the day, come back to El Segundo for dinner and drinks at one of the many award-winning restaurants. Who says you can't mix business and pleasure?

Consider yourself lucky if you're among the travelers visiting Southern California on vacation, because El Segundo is the region's hidden gem. Its central location makes it easy to hit all the must-see spots in the area, including many of SoCal's most famous beaches. The numerous hotels are refreshingly affordable, which means more money in your pocket for L.A. favorites like green juice, bike rentals on the beach or a night out on the town. It's also a great spot for families, with the nearby Pacific Coast Highway offering a scenic and convenient route to anywhere you could want to go, including Santa Monica Pier, Disneyland, Universal Studios and more.

Looking for a comfortable, stylish and convenient place to call home while visiting Southern California? El Segundo is everything you want and more.

I22-16

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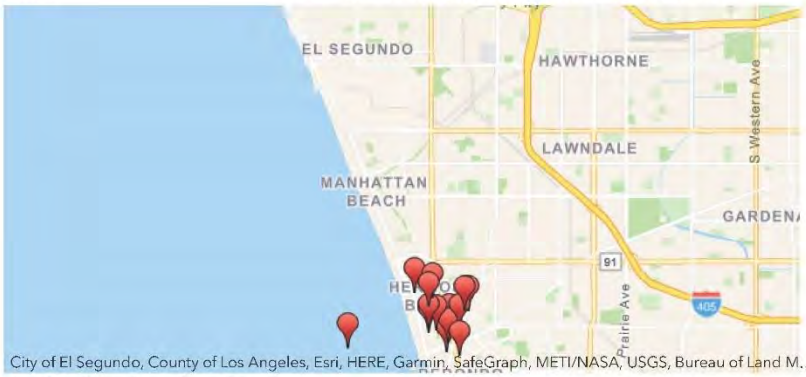

Total 15 locations found.

AC Hotel

ADDRESS:
2130 East Maple Avenue
El Segundo, CA 90245

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Modern Meeting Spaces

Aloft

ADDRESS:
475 North PCH
El Segundo, CA 90245

PHONE:
(424) 290-5555

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Parking
- Pet-friendly
- Pool
- Restaurant
- Room Service

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4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

- Smoke-free

Cambria Hotel LAX

ADDRESS:
199 Continental Boulevard
El Segundo, CA 90245

PHONE:
(310) 965-0555

AMENITIES:

- Bar
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Outdoor Pool
- Pet-friendly
- Restaurant
- Smoke-free
- Spa-inspired Bathrooms with Bluetooth Mirrors

Courtyard

ADDRESS:
2000 East Mariposa Avenue
El Segundo, CA 90245

PHONE:
(310) 322-0700

AMENITIES:

- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Pool
- Restaurant
- Room Service
- Smoke-free

DoubleTree

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4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

ADDRESS:
1985 East Grand Avenue
El Segundo, CA 90245

PHONE:
(310) 322-0999

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Parking
- Pool
- Restaurant
- Room Service
- Smoke-free

Embassy Suites

ADDRESS:
1440 East Imperial Avenue
El Segundo, CA 90245

PHONE:
(310) 640-3600

AMENITIES:
- Airport Shuttle
- Bar
- Fitness Center
- Free Breakfast
- Parking
- Pet-friendly
- Pool
- Restaurant
- Room Service

Extended Stay Hotels

ADDRESS:
1910 East Mariposa Avenue
El Segundo, CA 90245

PHONE:
(800) 804-3724

AMENITIES:
- Free Breakfast
- Kid-friendly
- Pet-friendly

Fairfield Inn

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4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

ADDRESS:
525 Pacific Coast Highway
El Segundo, CA 90245
PHONE:
(424) 290-5000

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Breakfast
- Kid-friendly
- Pool
- Restaurant
- Room Service
- Smoke-free

Hampton Inn & Suites

ADDRESS:
888 North Pacific Coast Highway
El Segundo, CA 90245
PHONE:
(310) 322-2900

AMENITIES:
- Airport Shuttle
- Bar
- Fitness Center
- Free Breakfast
- Free Wi-Fi
- Kid-friendly
- Pool

Hilton Garden Inn

ADDRESS:
2100 East Mariposa Avenue
El Segundo, CA 90245
PHONE:
(310) 726-0100

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Modern Meeting Spaces
- Parking
- Pool
- Restaurant
- Room Service
- Smoke-free

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Hotel 2Twentyone

ADDRESS:
221 Concord Street
El Segundo, CA 90245

PHONE:
(310) 322-6116

AMENITIES:
- Free Wi-Fi

Hyatt House

ADDRESS:
810 South Douglas
El Segundo, CA 90245

PHONE:
(310) 725-0100

AMENITIES:
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Smoke-free

Hyatt Place

ADDRESS:
750 North Nash Street
El Segundo, CA 90245

PHONE:
(310) 322-2880

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Restaurant
- Room Service
- Smoke-free

Residence Inn

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4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

ADDRESS:
2135 East El Segundo Boulevard
El Segundo, CA 90245

PHONE:
(310) 333-0888

AMENITIES:
- Airport Shuttle
- Business Center
- Fitness Center
- Free Breakfast
- Kid-friendly
- Parking
- Pet-friendly
- Pool
- Smoke-free

Travelodge

ADDRESS:
1804 East Sycamore
El Segundo, CA 90245

PHONE:
(800) 760-6483

AMENITIES:
- Business Center
- Fitness Center
- Free Breakfast
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Pool
- Smoke-free

AC Hotel

ADDRESS:
2130 East Maple Avenue
El Segundo, CA 90245

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- Modern Meeting Spaces

Aloft

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Courtyard

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4/5/2021 Hotels in El Segundo | El Segundo Hospitality and Tourism

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https://www.destinationelsegundo.com/hotels/all-hotels 11/12

I22-16 Cont.

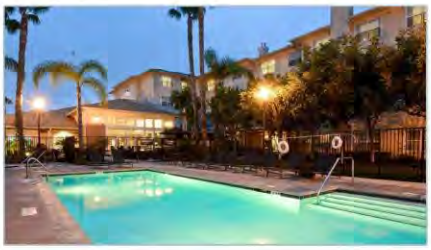
Hyatt Place

ADDRESS:
750 North Nash Street
El Segundo, CA 90245

PHONE:
(310) 322-2880

AMENITIES:
- Airport Shuttle
- Bar
- Business Center
- Fitness Center
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Restaurant
- Room Service
- Smoke-free

Residence Inn



ADDRESS:
2135 East El Segundo Boulevard
El Segundo, CA 90245

PHONE:
(310) 333-0888

AMENITIES:
- Airport Shuttle
- Business Center
- Fitness Center
- Free Breakfast
- Kid-friendly
- Parking
- Pet-friendly
- Pool
- Smoke-free

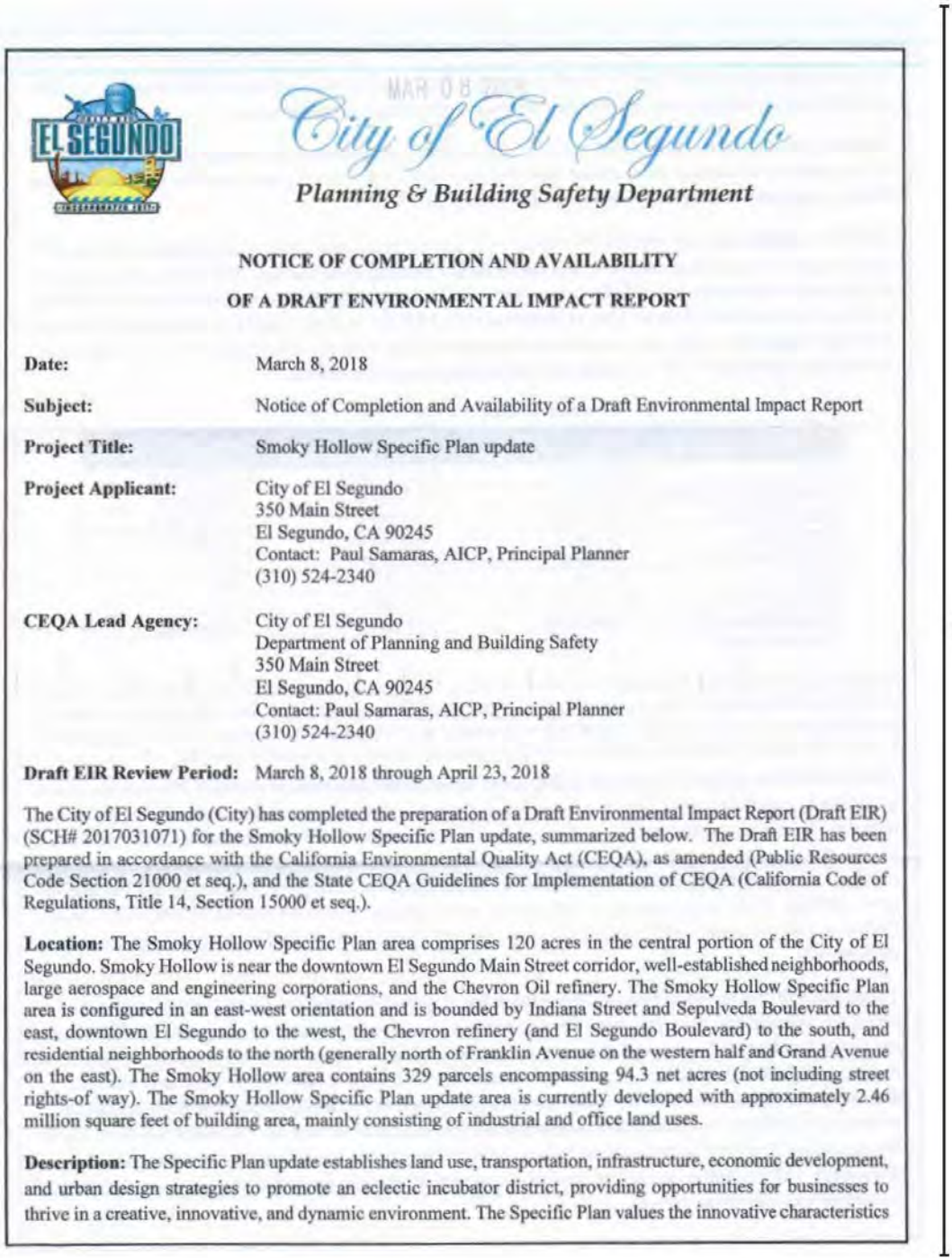
Travelodge

ADDRESS:
1804 East Sycamore
El Segundo, CA 90245

PHONE:
(800) 760-6483

AMENITIES:
- Business Center
- Fitness Center
- Free Breakfast
- Free Wi-Fi
- Kid-friendly
- Pet-friendly
- Pool
- Smoke-free

I22-16
Cont.



MAR 08

City of El Segundo

Planning & Building Safety Department

NOTICE OF COMPLETION AND AVAILABILITY

OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date:	March 8, 2018
Subject:	Notice of Completion and Availability of a Draft Environmental Impact Report
Project Title:	Smoky Hollow Specific Plan update
Project Applicant:	City of El Segundo 350 Main Street El Segundo, CA 90245 Contact: Paul Samaras, AICP, Principal Planner (310) 524-2340
CEQA Lead Agency:	City of El Segundo Department of Planning and Building Safety 350 Main Street El Segundo, CA 90245 Contact: Paul Samaras, AICP, Principal Planner (310) 524-2340
Draft EIR Review Period:	March 8, 2018 through April 23, 2018

The City of El Segundo (City) has completed the preparation of a Draft Environmental Impact Report (Draft EIR) (SCH# 2017031071) for the Smoky Hollow Specific Plan update, summarized below. The Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA), as amended (Public Resources Code Section 21000 et seq.), and the State CEQA Guidelines for Implementation of CEQA (California Code of Regulations, Title 14, Section 15000 et seq.).

Location: The Smoky Hollow Specific Plan area comprises 120 acres in the central portion of the City of El Segundo. Smoky Hollow is near the downtown El Segundo Main Street corridor, well-established neighborhoods, large aerospace and engineering corporations, and the Chevron Oil refinery. The Smoky Hollow Specific Plan area is configured in an east-west orientation and is bounded by Indiana Street and Sepulveda Boulevard to the east, downtown El Segundo to the west, the Chevron refinery (and El Segundo Boulevard) to the south, and residential neighborhoods to the north (generally north of Franklin Avenue on the western half and Grand Avenue on the east). The Smoky Hollow area contains 329 parcels encompassing 94.3 net acres (not including street rights-of way). The Smoky Hollow Specific Plan update area is currently developed with approximately 2.46 million square feet of building area, mainly consisting of industrial and office land uses.

Description: The Specific Plan update establishes land use, transportation, infrastructure, economic development, and urban design strategies to promote an eclectic incubator district, providing opportunities for businesses to thrive in a creative, innovative, and dynamic environment. The Specific Plan values the innovative characteristics

I22-17

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

LOCAL NEWS

El Segundo may study building housing east of Sepulveda for the first time

By MEGAN BARNES | mbarnes@scng.com | Long Beach Press-Telegram
PUBLISHED: March 7, 2018 at 6:13 p.m. | UPDATED: October 30, 2018 at 2:39 p.m.

https://www.dailybreeze.com/2018/03/07/el-segundo-may-study-building-housing-east-of-sepulveda-for-the-first-time/?fbclid=IwAR3J740z4v... 1/5

I22-18

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

Housing in El Segundo

El Segundo is considering using a $650,000 Metro grant to study future development on the east side of the city, including the possibility of high-density housing. Housing has only existed in the northwest quadrant of the city.

Source: City of El Segundo

PAUL PENZELLA — SCNG

El Segundo is considering using a $650,000 Metro grant to study future development on the east side of the city, including high-density housing.

But city officials don't seem open to the idea of adding first-ever housing to the area, let alone affordable or low-income units.

At Tuesday's council meeting, city staff presented the Transit-Oriented Development Planning Grant as a way to fund a major piece of the first update in 26 years of the city's General Plan, a document that guides future development.

A special fund created in 2009 for the long overdue overhaul has accumulated $600,000, about half of the estimated $1.5 million to $2 million needed for the effort.

With a phased approach, the city could use $370,000 in matching funds from the account combined with the Metro grant to cover a specific plan for the east side, which is a major component of the General Plan update.

https://www.dailybreeze.com/2018/03/07/el-segundo-may-study-building-housing-east-of-sepulveda-for-the-first-time/?fbclid=IwAR3J740z4v... 2/6

I22-18 Cont.

The Metro grant, which was OK'd by the agency's board of directors last week and would need approval next from the City Council, would explore both commercial and residential development opportunities near the city's three Metro stations. That includes studying the feasibility of building high-density affordable or low-income housing.

Hot topic

Building housing east of Sepulveda Boulevard is something the city's influential Economic Development Advisory Council has begun to explore separately.

But in the tight-knit, uniquely configured community known as "Mayberry by the Sea," it's a touchy subject.

Residential development has only existed in the northwest quadrant of town north of the Chevron Oil Refinery. The east side, divided by Sepulveda Boulevard, consists of industrial and commercial development, from shopping centers and creative offices, to the skyscrapers of major corporations, from Raytheon Co. to toymaker Mattel.

EDAC's plans to study eastside housing were met with an attempt late last year to put an initiative on the April ballot that would require voter approval for zoning changes to allow such development. But Councilwoman Carol Pirsztuk failed to win the support of her council colleagues for the measure.

Gregg McClain, a planning manager for the city, said the Metro study primarily would focus on increasing and reconfiguring commercial development, which today is largely made up of buildings sprinkled on vast parking lots.

"One thing we we note is that back in '80s and early '90s when the Green Line was planned, the reason it goes through El Segundo is because El Segundo had an employment base at the time that was pushing up toward 100,000," he said.

The east side was never intended to be a residential area and planners knew that when they built the transit stations, McClain said.

"We personally don't support pursuing housing, but we want to study it, we want to study why. We have to look at this issue anyway, whether we take the grant or not," he said. "This is a good opportunity to study that question with someone else's funding, and it does take us a step closer to getting our General Plan done."

If the council agrees to use the Metro grant, the study would take about three years and involve the community. The General Plan could be completed in about five years, according to city staff.

I22-18 Cont.

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

Not a done deal

The grant contract will go before city leaders in coming months, but they first want City Attorney Mark Hensley to closely review it for what could be required of the city, housing-wise.

Mayor Suzanne Fuentes said she was "stunned" that the city applied for the grant last summer without receiving input from the Planning Commission, the City Council or residents.

"This is a transit-oriented grant, it's all about increasing density east of Sepulveda, and there are so many things in here that don't even sound like El Segundo," she said of the grant application. "It talks about areas that are fenced — they're fenced because items of our highest national security are in those buildings and it talks about them like they're an inconvenience."

Fuentes said she doesn't believe the city's vision is "to be the Mecca for low-income housing."

Councilman Don Brann said whether the city uses the grant or not, El Segundo needs to start the General Plan update.

"It should've been started in 2012 or 2013, and, if necessary, we shouldn't just rely on the fund we've been collecting," he said.

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I22-18 Cont.

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

tags: development, housing, Top Stories Breeze

Megan Barnes | reporter

Megan Barnes covers crime and public safety for the Press-Telegram. She was previously a city reporter at the Daily Breeze, where she covered the South Bay beach cities and the Palos Verdes Peninsula. Before that, she was a freelancer writing about LGBT news and her hometown of San Pedro, where she probably made your latte at Starbucks. She loves iced Americanos and Radiohead and finally got to see them live on the A Moon Shaped Pool tour. It was magical.

mbarnes@scng.com

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I22-18 Cont.

4/4/2021 El Segundo may study building housing east of Sepulveda for the first time – Daily Breeze

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I22-18 Cont.

https://www.dailybreeze.com/2018/03/07/el-segundo-may-study-building-housing-east-of-sepulveda-for-the-first-time/?fbclid=IwAR3J740z4v... 6/6

Response to Comment Letter I22

Venu Joshi
April 4, 2021

I22-1 This comment is introductory in nature; no response is required.

I22-2 This comment states that the Draft EIR has "neglected impacts to key areas," specifically within the vicinity of the commenter's residence, which is along Washington Street. The comment further states that the proposed Project would cause a "major impact" to nearby residents and to the City in general. The commenter notes that the City should consider the character of the area and "refuse to allow any super high-density residential construction" and should instead build low-density residential uses across the City.

Regarding the comment on neighborhood impacts, the Project's effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[14] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details.). As such, the potential environmental effects of the Project on its surroundings (including the surrounding neighborhood) have been evaluated and disclosed in the Draft EIR, and any identified significant impacts would be mitigated to the extent feasible. The commenter's concerns regarding negative impacts to their neighborhood will be included as part of this Final EIR for City decision makers' review and consideration.

The commenter's suggestion for the City to develop lower-density residential uses is addressed in Responses to Comments I21-12 and I21-31. As explained in those responses, spreading out the proposed Project's land uses across wider areas of land would increase environmental impacts in multiple categories. Nevertheless, the commenter's suggestions regarding land use in City will be included in this Final EIR for review and consideration by decision makers.

Additionally, while community character is not a topic that is specifically addressed under CEQA, effects related to the proposed Project's consistency with policies governing scenic quality and with the City's land use plans and goals have been analyzed in the Draft EIR in Sections 4.1 and 4.9, respectively. Significant impacts were not identified in these categories.

I22-3 This comment expresses similar concerns and suggestions as Comments I21-12 and I21-31. As such, refer to Responses to Comments I21-12 and I21-31. Additionally, the commenter attaches an excerpt from the Los Angeles Times website and states that the City would be considered more dense if density calculations were limited to the residential portions of the City. The commenter further states that adding more density to the existing residential area of the City is not the right approach. The commenter

[14] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

also notes that population growth trends in the City are similar to those of nearby cities such as Manhattan Beach and Redondo Beach.

As described in Responses to Comments I21-12 and I21-31, dispersing the proposed Project across a larger area of land and constructing the proposed housing at a lower density would increase environmental impacts in multiple categories. Furthermore, the City is generally built out under current conditions. As such, building residences throughout areas of the City that are currently commercial or industrial would require redevelopment. While some of the City's industrial areas are currently being contemplated for redevelopment (e.g., the Smoky Hollow Specific Plan area), such areas may not be suitable for residential land uses, due to contamination concerns and/or land use incompatibility. Nevertheless, the commenter's suggestion to spread out residential land uses will be included in this Final EIR for review and consideration by decision makers.

I22-4 This comment expresses general opposition to the Project and to increased density. The comment does not raise any specific concerns regarding the environmental analysis in the EIR. No response is required; however, the commenter's objection to the Project and to high-density housing in the City will be included in this Final EIR for review and consideration by decision makers.

I22-5 This comment recommends studying the benefits of building a new hotel along the east and west sides of PCH. The commenter states that the City has 2,600 hotel rooms but that more may be needed in the future to accommodate large events. This comment does not pertain to the adequacy of the environmental analysis in the EIR. However, the commenter's recommendation for the City to study the benefits of additional hotels will be included in this Final EIR for review and consideration by decision makers.

I22-6 This comment consists of recommendations for alternative locations for new housing in the City. The commenter recommends the following: rezoning areas of the City that are vacant and underutilized for redevelopment with low-density apartment complexes; rezoning the Smoky Hollow Specific Plan area for redevelopment with mixed-use residential developments; and/or, building residential uses east of Pacific Coast Highway.

The suggestion for alternative locations to the proposed Project site, including new housing east of Pacific Coast Highway, is addressed in Response to Comment I21-12. The topic of building the proposed Project and/or new residences in the Smoky Hollow Specific Plan area is also addressed in Response to Comment I21-12. The suggestion of constructing lower-density housing in other areas of the City is also addressed in Response to Comment I21-12. As noted therein, spreading out the proposed Project's residential component across a larger land area would likely increase impacts in multiple environmental categories. Furthermore, the portions of the City that are not currently used for residential purposes are generally industrial or commercial in nature. While some properties may be vacant or underutilized, sites that were formerly used for industrial purposes may not be suitable for residential development, due to prior use of hazardous materials. Additionally, construction of residences within industrial and/or commercial areas, particularly where some industrial uses are still operational, may introduce an incompatible land use to the area. While the commenter's suggested alternate locations have been rejected as infeasible (as further enumerated in Section 6.4 of the Draft EIR and Responses to Comments I21-12 and I21-31), the suggestion for constructing lower-density housing elsewhere in the City will be included in this Final EIR for review and consideration by decision makers.

I22-7 This comment expresses concerns regarding increased traffic on Washington Street and Mariposa Avenue and states that the draft EIR concluded that no impact would occur. The commenter also states that Grand Avenue and Holly Avenue would be clogged by traffic associated with the proposed Project. The commenter further states that the proposed improvement on Mariposa Avenue would not address all traffic issues, because it would not address effects to other surrounding streets, such as Palm Avenue and Maple Avenue, which may need additional lanes to accommodate the new traffic. The comment concludes by stating that portions of the Draft EIR studies were conducted during COVID-19, and the EIR did not adjust for the increased traffic that would occur once COVID-19 closures are over.

Refer to Response to Comment I21-13, which addresses concerns regarding COVID-19 conditions and its effects on EIR data. Refer to Responses to Comments I6-3, I18-3, I21-6, and I21-10, which all address concerns regarding increased traffic on neighboring streets. Furthermore, it is noted that increased traffic and traffic congestion are no longer considered impacts on the environment under CEQA. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As such, the EIR does not identify any environmental impacts pertaining to increased traffic.

I22-8 This comment pertains to the EIR's impact determination for parks and recreation and states that the EIR's determination that no significant impacts would occur is "highly misrepresented." The comment also states that the Project does not include recreational facilities for residents.

Refer to Responses to Comments I21-5 and I21-18, which also address concerns regarding the Project's impacts to parks and recreational facilities and the EIR's analysis of this topic. The Project would include common open space areas, including rooftop pools and community rooms. These on-site amenities would provide an alternative to off-site public parks and recreational facilities, allowing the Project's residents to recreate on the Project site while incrementally reducing impacts to off-site public parks and recreational facilities.

I22-9 This comment states that the Draft EIR "neglects and underrepresents" the air quality impacts that would be caused by the proposed development, including associated traffic and emissions.

The topic of air quality is addressed and analyzed in Section 4.2 of the Draft EIR. The air quality analysis includes quantitative modeling that takes into consideration Project-related traffic on nearby roadways. Emissions from Project-generated vehicle trips are referred to as "mobile source" emissions in the air quality analysis. The air emissions modeling also takes into consideration "area source" emissions that would be associated with Project operations (e.g., emissions from consumer product use, architectural coatings, and landscape maintenance equipment), as well as energy-related emissions (e.g., emissions associated with natural gas usage in space heating, water heating, and stoves). As demonstrated in Section 4.2.4 of the Draft EIR, the Project's estimated maximum daily operational air emissions, including mobile source emissions (i.e., traffic-related emissions), would not exceed the applicable thresholds. As such, the Draft EIR contains a detailed analysis of the Project's effects on air quality, which includes modeling based on the proposed land uses and expected traffic generation. No significant impacts were identified based on this analysis.

I22-10 The comment asserts the Draft EIR "underplays" the permanent increase in noise to the offsite environment, and claims LAX aviation traffic noise was incorrectly studied.

As answered in Response to Comment I21-8, potential perceptible (i.e., at least 3 dB) noise amplification due to sound-reflecting building facades typically requires the receptor to be near the building facades—such as a listener on a highly trafficked urban roadway bounded by tall, densely-packed building facades. But when the perpendicular distance between a receptor and the façade is large, such as the approximate 500 feet between the single-family homes adjoining Washington Park and the nearest proposed PCC structural facades, the additional received sound energy due to that reflection is greatly diminished. Furthermore, addition of the proposed PCC buildings would introduce more path-occluding barriers between Pacific Coast Highway roadway traffic and the neighborhoods to the west, which was reflected in Table 4.10-6 of the Draft EIR and is reproduced to include addition of "ST7", a representative receptor on Washington Street (west side, mid-block between E. Palm Avenue and E. Elm Avenue) to demonstrate consideration of the single-family home neighborhood west of Washington Park.

I22-11 This comment raises concerns regarding the Shared Parking Analysis (Appendix J-2 in the Draft EIR) and the assumptions made in the analysis. This comment also states that the analysis overestimates transit use and that there is a lack of reliable transit in the Los Angeles area. The commenter also states that the analysis in the EIR relies on data from other cities with highly developed public transportation, such as cities in the Bay Area.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. The Metro C Line Mariposa Station is 0.5 miles from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 run along Pacific Coast Highway with stops near the Project site. The Palo Alto data referenced in the Shared Parking Analysis is shown as a point of comparison and indicated less parking demand even in areas not well served by transit (and even less near CalTrain).

The comment states that it is wrongly implied in the EIR that most of affordable housing residents do not own a car and use public transportation instead. This is not stated anywhere in the EIR. The proposed Specific Plan in Appendix B of the Draft EIR does, however, provide for less parking per unit for affordable units than for market rate units (0.5 spaces per studio unit, 1 space per 1-bedroom unit, and 1.5 spaces per 2-bedroom unit). A reduced parking requirement for affordable units is supported by research including empirical surveys conducted at affordable family units in Los Angeles, which found an average parking demand rate of 0.84 spaces per unit.

This comment also states that when the hotel is at full capacity, residents would be forced to park on the streets. Overnight hotel parking counts were conducted on a Saturday night. Since the surveys were done overnight (when hotel demand is highest) at 2 AM, they were technically done early Sunday morning. Regarding seasonality, the hotels were 75% and 76% occupied on the nights of the surveys. Therefore, the rates were factored up to represent 100% occupancy when the hotel parking demands were estimated. In addition, the assigned parking for residents is not part of the shared pool of parking and therefore will not be shared with the hotels and commercial uses.

This comment also expresses concerns regarding the potential permit parking district. If desired by the neighborhood, the applicant plans to work with residents to suggest the boundaries of this potential

permit parking district. A permit parking district would be implemented by the City at the request and approval of the residents and would allow potentially only residents to park on the street.

The shared parking analysis indicates that there would be sufficient parking for all uses that are part of the Project and therefore the need for overflow parking is not anticipated.

I22-12 This comment states that the Draft EIR does not address potential impacts to the General Plan Public Safety Element or the need for additional City staff (fire, police, paramedics, etc.) to accommodate the proposed additional residents and the retail spaces.

The Project's consistency with the goals, objectives, policies, and programs set forth in the City's Public Safety Element is discussed in Section 4.9 of the Draft EIR. Based on the analysis presented therein, the proposed Project was determined to be consistent with the applicable goals, objectives, policies, and programs from the Safety Element. As such, this topic has been addressed and discussed in the Draft EIR. While public safety itself is not a discreet environmental topic under CEQA, the topics of emergency access, traffic safety, and pedestrian and bicycle safety are addressed in several sections throughout the Draft EIR. Specifically, Section 4.13 discusses emergency access, roadway hazards, and bicycle and pedestrian facilities, including access and safety. Section 4.7 discusses emergency response and evacuation. Impacts in these categories were determined to be less than significant. Additionally, the ability of existing public services to accommodate the proposed Project is addressed in Section 4.12 of the Draft EIR. This section discusses the capacities of fire protection services, emergency medical services, police protection, schools, library services, and City administrative services. No significant impacts were identified for these categories as a result of the proposed Project.

I22-13 This comment concludes the comment letter and requests that the Project not be considered until the comments in the letter have been incorporated.

The commenter's concerns pertaining to the environmental analysis in the EIR have been addressed by the City in the responses above. This comment letter and associated responses will be provided to City decision makers for review and consideration as part of this Final EIR, prior to the decision hearing for the Project.

I22-14 The commenter has attached an excerpt from the Los Angeles Times Neighborhood Report, in support of Comment I22-3. The comment associated with this attachment pertains to residential density in the City and is addressed in Response to Comment I22-3.

I22-15 The commenter has attached an excerpt from the City's comments on the LAX Airfield and Terminal Modernization Project Draft EIR, in support of Comment I22-4. The comment associated with this attachment pertains to opposition to high-density residential development. The commenter states that since the City opposes development at LAX, it should also oppose high-density residential developments within the City, such as the proposed Project. Refer to Response to Comment I22-4, which addresses the commenter's concerns regarding high-density residential development.

I22-16 The commenter has attached a webpage listing hotels in the City, in support of Comment I22-5. This comment recommends that the City study the possibility of building new hotels along Pacific Coast Highway. Refer to Response to Comment I22-5, which addresses this comment.

I22-17 The commenter has attached the notice of availability associated with the 2018 Draft EIR for the Smoky Hollow Specific Plan update, in support of Comment I22-6, which presents suggestions for alternate locations for the proposed Project and new residences in the City. One of the suggested alternate locations is the Smoky Hollow Specific Plan area. Refer to Response to Comment I22-6, which addresses the commenter's suggestions for alternate locations.

I22-18 The commenter has attached a news article from 2018 about the potential for the City to study housing on the east side of Sepulveda Boulevard, to support statements regarding past opposition to housing on the east side of Pacific Coast Highway as part of a larger comment (Comment I22-6) that suggests an alternate location for the Project and new housing on the east side of Pacific Coast Highway. Refer to Response to Comment I22-6, which addresses the commenter's suggestions for alternate locations.

Comment Letter I23

From: James Decordova [redacted]
Sent: Thursday, April 8, 2021 1:40 PM
To: Samaras, Paul
Cc: ic.ccurry@gmail.com; Boyles,Drew (Mayor); Pimentel, Chris (Mayor Pro Tem); Pirsztuk, Carol (Council Member); Giroux, Lance (Council Member); Nicol, Scot (Council Member)
Subject: Pacific Commons Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Mr Samaras, I am a 40 year El Segundo resident. My home is in the 400 block of Washington St. Is it possible to see a map of the proposed development with specific detail showing where is planned housing, where is planned retail, and where are the proposed rental units? Perhaps an overlay of the current buildings, and their proposed replacements. This would be greatly appreciated. I23-1

Myself and many of my neighbors on Washington St never received the invite to the Zoom meeting held on March 31 until after the meeting was held. Suffice to say we are concerned, especially with the development of the International Rectifier site and its impact on traffic, and quality of life issues. I23-2

Thank You
Jim deCordova

1

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Response to Comment Letter I23

Jim deCordova
April 8, 2021

I23-1 This comment asks if there is a map of the proposed Project specifying where housing (townhomes), rental units, and retail is planned. The comment further requests an overlay of current buildings with the proposed Project. Figure 3-1, Conceptual Site Plan, within Chapter 3 of the Draft EIR includes the requested items. Figure 3-1 provides the conceptual site plan on the Project site with labels indicating existing structures surrounding the proposed development. Please see Figure 2-1, Regional Location and Vicinity Map, within Chapter 2 of the Draft EIR for the Project site's footprint overlaid onto existing conditions.

I23-2 This comment states the commenter and their neighbors did not receive an invite to the meeting held on March 31st, 2021. The meeting referenced was not a City-organized meeting or related to the CEQA documentation. This meeting was hosted by the Project Applicant and there were no specific notification requirements for the Applicant's outreach meeting. The comment further states concern for the proposed Project and cites a recent project at the former International Rectifier site and its impacts on traffic and quality of life. For discussion regarding an additional related project, see Topical Response No. 1 – Cumulative Impacts, above. In addition, please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation.

Additionally, while quality of life is not a topic that is specifically addressed under CEQA, effects to surrounding neighborhoods, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. With implementation of mitigation measures MM-AQ-1, MM-HAZ-1, MM-HAZ-2, MM-NOI-1, and MM-TRA-1, impacts in these categories were determined to be below a level of significance (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[15] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details).

[15] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

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Comment Letter I24

From: Julia Withee [redacted]
Sent: Friday, April 9, 2021 12:23 PM
To: Samaras, Paul
Subject: Support of Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Good Morning Paul,

Happy Friday! I wanted to reach out to you in support of your Pacific Coast Commons project located in El Segundo, CA.

My husband and I moved to El Segundo three years ago as a newly married couple. We desperately wanted to live in the South Bay to remain close to our family and my husband's local office. However, it was a difficult process due to the lack of quality and well-priced apartment options. We finally found an amazing apartment in El Segundo where we had our first child. Eventually we outgrew our apartment and after seven months of searching for homes, placing offers, getting rejected, etc, we bought our first home in El Segundo! We were exceptionally lucky to be able to find and purchase a home in this incredible town. We have many friends who have been searching for a quality apartment or home in El Segundo and have had no luck.

I24-1

As you know, a huge part of what makes this town exceptional is the people. The teachers, engineers, dog groomers, waiters, entrepreneurs and many more community members make this town the town that it is! These workers deserve to live close to their jobs. The addition of this mixed-use housing project will not only improve the lives of El Segundo workers, but also improve the aesthetics, accessibility, and utility of that section of PCH. This project will add so much value to the city of El Segundo. Thank you for your commitment to improving the lives of current and future El Segundo residents!

Sincerely,
Julia Riboli

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Response to Comment Letter I24

Julia Riboli
April 9, 2021

I24-1 This comment expresses support for the proposed Project and cites the housing component, mixed-use proposal, aesthetics, accessibility, and utility of Pacific Coast Highway as reasons. The commenter's general support to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

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Comment Letter I25

From: Bianca Mendoza [redacted]
Sent: Sunday, April 11, 2021 1:59 PM
To: Samaras, Paul; Planning
Subject: Pacific Coast Commons Development Proposal

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Samaras:

Please see my comments and questions with regard to the Pacific Coast Commons Development proposal:

1. Developer Lionel Uhry said it himself in the first few minutes of the ZOOM meeting on 3/31/2021 1730hrs: "PCC is being built in this location so as not to DISTURB the bulk of El Segundo population." So, what about the population that **is** being **DISTURBED**, what is being done for them? If housing were spread out to various other locations in El Segundo or moved East of PCH (rezoned, just like current site was to allow PCC to build) or in Smokey Hollow, the "DISTURBED" weight is spread out across a broader segment of our City. I25-1

2. There are many reasons why a municipality would want to develop and why people would support it: financial gain, benefit for the community, benefit for additional housing (questionable since we have tons for rent now at a 25% discount from before) or some mix of all. Question is, this proposal may have benefits but what is being done for those that stand to lose from this?

3. If a large contributing factor for development is a state requirement, then we, as for housing, need to spread out. We have 99% of our population in less than 25% of city limits.

   a. Why exacerbate some issues and create negative impacts for your population when you can achieve the goals by building east of PCH which solves or avoids almost all negatives and puts those new residents closer to **transit** which is one of the primary goals?
   b. If the City fears losing out of some type of money then it is quite unfair that the City gains on the shoulders of those largely impacted. It would be dubious to have issue with this because it is the same argument the City has made to LAX for decades and most recently a few weeks ago. Also, the airport has made numerous adjustments in how they operate over the years, provided funding to the City to mitigate impacts, and is quite sensitive to El Segundo. I know this from personal experience before and after working for Los Angeles World Airports (LAWA). If adopted, is the City prepared to do the same for its OWN impacted citizens or is that just an issue if someone ELSE wants to expand? I25-2

4. Building east of PCH is a win-win. It's closer to **transit**, doesn't disturb nor disrupt existing community, and it's possible via rezoning just like this proposal had leading up to it. Also, we know the City is considering it, as it is one of the "Housing Element's" survey choices for where to expand. Please see: https://www.elsegundo.org/government/departments/development-services/planning-division/housing-element-update-2021-2029 I25-3

5. How much money does El Segundo expect to receive if proposal adopted?

6. What percentage of money is the City going to use to mitigate negative impacts? I25-4

7. What percentage of money is being required of developer to mitigate negative impacts?

8. Why are so many units needed? We currently have more "For Rent" availability than has been seen in decades all over El Segundo. Additionally, the average monthly rent is down approx. 25%. Therefore, supply is I25-5

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up, price is down which is a strong argument against a high density development or at least a scaled down version of it.
Why fix a problem that is, at least in part, fixing itself?

I25-5 Cont.

9. The most environmentally friendly option is a "no build", which should be done. We have numerous environmentally friendly programs in place and continuing.

I25-6

Respectfully,

Bianca Mendoza

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Response to Comment Letter I25

Bianca Mendoza
April 11, 2021

I25-1 In this comment, the commenter asks what is being done for residences that are affected by the Project. The commenter further suggests that new housing be spread out to other locations in the City or built to the east of Pacific Coast Highway or within the Smoky Hollow Specific Plan area.

The proposed Project has been assessed for its impacts on the environment as part of the Draft EIR. Effects to surrounding neighborhoods and nearby residents, particularly in the categories of aesthetics, air quality, hazards and hazardous materials, land use and planning, noise, and transportation, are evaluated in Sections 4.1, 4.2, 4.7, 4.9, 4.10, and 4.13 of the Draft EIR, respectively. Mitigation measures have been set forth to address the significant impacts that were identified in these categories (with the exception of an impact pertaining to consistency with the applicable Air Quality Management Plan (AQMP), which is a policy document that will be updated in 2022[16] and the temporary inconsistency with the AQMP assumptions would not result in direct impacts to the environment; see Section 4.2.7 of the Draft EIR for details). If the Project were approved by the City, the City would be required to adopt and enforce the mitigation measures.

For a response to the commenter's recommended alternate locations, see Responses to Comments I21-12 and I21-31.

I25-2 This comment states that the proposed Project may have benefits; however, the commenter asks "what is being done" for people who "stand to lose." The comment further states that most of the City's residents live within 25% of the City's land area. The commenter suggests building housing on the east side of Pacific Coast Highway. The commenter also states that the City opposes development within LAX and that the City should do the same for development within the City that affects its own citizens.

CEQA requires decision makers to weigh the potentially significant environmental impacts of a project against its potential benefits. As such, City decision makers will consider the potential impacts of the Project, together with its benefits, when making a decision on whether to approve or deny the Project. As explained in Response to Comment I25-1, mitigation measures would also be enforced to minimize the Project's potentially significant impacts, if the Project were to be approved.

For responses to the commenter's suggestions for spreading new housing across other areas of the City and/or developing housing on the east side of Pacific Coast Highway, refer to Responses to Comments I21-12 and I21-31.

I25-3 This comment lists potential benefits of constructing housing on the east side of Pacific Coast Highway, such as proximity to transit and reduced disturbance to the existing community, and states that this would be possible through rezoning, similar to the rezoning that is associated with the proposed Project.

[16] South Coast Air Quality Management District (SCAQMD). 2021. Air Quality Management Plan (AQMP). Accessed June 4, 2021. Web. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan

For a response to the suggestion for alternate locations on the east side of Pacific Coast Highway, see Responses to Comments I21-12 and I21-31.

The comment further states that the City is considering housing on the east side of Pacific Coast Highway and cites the City's Housing Element update. The commenter states that the east side of Pacific Coast Highway is one of the Housing Element survey choices for where housing could expand.

The Housing Element update is anticipated to be adopted by the City in the fourth quarter of 2021. As such, the Housing Element update is currently in draft form and is not available for review at the time of this writing. The City's future plans regarding locations for future housing are therefore speculative at this time. Nevertheless, the commenter's support for expanded housing east of Pacific Coast Highway will be included as part of this Final EIR for review and consideration by decision makers.

I25-4 This comment presents questions for the City regarding financial aspects of the proposed Project, such as the amount of money the City expects to receive as a result of the Project, the percentage of funds to be used for mitigation, and the percentage of the applicant's funds to be used for mitigation.

These questions and comments regarding the Project's finances do not pertain to the environmental analysis in the EIR. As such, no response is required. However, these questions will be included as part of this Final EIR for review and consideration by City decision makers. If the Project were approved, the City and applicant would be required to adhere to the mitigation monitoring and reporting program that must be adopted along with the Project (see Chapter 4 of this Final EIR). The mitigation monitoring and reporting program identifies the party responsible for implementing each mitigation measure, as well as the agency responsible for monitoring implementation.

I25-5 This comment asks why "so many units" are needed. The comment further states that the availability of rental units has increased in the City and that rental costs are decreasing. The commenter states that the increased supply and decreased prices provide a strong argument against a high-density development. The commenter recommends a scaled-down version of the Project and states that the housing supply issue is "fixing itself."

The proposed Project's 263 new residential units would assist the City in meeting the mandated RHNA allocation of 492 housing units. The proposed Project would also help address the regional housing shortage by providing housing in close proximity to existing job opportunities. However, it is ultimately the decision of the City's elected officials to approve or deny the proposed Project and to weigh the Project's benefits (including the benefits of additional housing in the City) against its potential impacts (including potential impacts to neighboring residents).

The Draft EIR presents and analyzes two reduced versions of the proposed Project in Section 6.5. City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including the reduced project alternatives, which are identified as Alternatives B and C). The commenter's support for reduced versions of the proposed Project will be included in this Final EIR for review and consideration by decision makers.

I25-6 This comment states that the most environmentally friendly option would be a "no build" option. The comment also states that the City has numerous environmentally friendly programs in place.

The Draft EIR presents and analyzes a “no build” alternative to the proposed Project, which is identified in Section 6.5 as Alternative A. The analysis identifies Alternative A as the environmentally superior alternative. As stated above, City decision makers have the ability to approve the proposed Project or any of the alternatives evaluated in the EIR (including Alternative A). As such, the commenter’s support for Alternative A will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I26

From: paul morrison [redacted]
Sent: Sunday, April 11, 2021 3:24 PM
To: Samaras, Paul
Subject: ENVIRONMENTAL REVIEW PUBLIC COMMENT

Follow Up Flag: Follow up
Flag Status: Flagged

Paul Morrison
421 Indiana St. Apt #4
El Segundo, Ca
90245

exmudshark@yahoo.com
310-283-0301

I appreciate this opportunity to comment on the Environment Review for the PCC construction project.

I have been a resident of El Segundo for 25 years, residing in the same apartment for this duration. I am grateful for the opportunities that life in El Segundo has afforded me. I have been a law abiding member of the community during this time, save for one traffic citation: a seatbelt violation 1 1/2 blocks from my apartment.

I moved to El Segundo after a transfer from the City of Los Angeles Survey Division to work on the C-117 Hyperion Phase 2 Construction Project. As a member of that group of surveyors, I helped to complete the various projects assigned to us; eight of the reactors, twenty of the clarifiers, the TSF building and assorted projects to bring the Hyperion Waste Water Treatment Center up to World Class Standards. I26-1

I was the last surveyor to leave our permanent office at the plant. Before I left, I surveyed the entire site, leaving survey control at every intersection, both horizontal and vertical. This control network is the basis for every improvement on the plant. It will be forever used by the engineers, the contractors and the surveyors for the life of this plant.

I would like to address the ES-1 Summary of Project Impacts, page ES-23: Population and Housing. Specifically: Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? The impact is recorded as "Less than Significant Impact".

The basis for my response is predicated on my 33 years of survey experience, the last 16 years of which I was employed as a City of Los Angeles Survey Party Chief, specializing in construction work. I fear this project will doom the two apartment building on Indiana Street, #403 and #421 (my residence), situated directly West of the parking structure. I am one of the working class tenants that I believe will be displaced due to this construction project, which makes me, in essence, an "UNsubstantial number of existing people" per the draft report. The prospect of finding alternative housing at my current rental rate appears extremely dim. Those of us that live and work in the area will not qualify for the "affordable housing" units due to our incomes, yet we will find ourselves unable to procure similar rental units in El Segundo. Once again, those that work for you are unable to live with you. I find this extremely bitter, considering that I will retire on May 8th of this year with a much reduced income. I26-2

I have worked around construction projects similar to this one. The level of disruption to those in the immediate vicinity will be intense and prolonged. The excavation required for the subsurface parking structure will require "I" beams, lagging and pile drivers. Such noise levels and vibration will not be modified by any type of "temporary noise barriers". It is a deafening, grueling procedure, considering the number of "I" beams required for the excavation. The truck traffic, noise and dust will be constant until this phase is completed. After that, the actual construction will take on the appearance of a sky scrapper being built. There will have to be an on site, permanent crane to move construction materials around the site. It will take on the appearance of a major construction site, which it will be, and this will take place ADJACENT to a zoned residential area - in such close proximity I have never witnessed before in my career. I26-3

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I expect a certain number of existing tenants in the two aforementioned apartments to eventually move out because of this project. As they leave, I view, dimly, any prospects of new renters willing to live next to this site, considering it's two plus years of construction. As the apartments lose tenants and become less and less profitable for the owners, what choice will they have but to sell out to another developer and replace affordable housing units with condominiums and their associated exorbitant price. To conclude that the project will have "Less than significant Impact" on the surrounding area seems to me a gross miscalculation, at the expense of an existing working class tenant population. I am appalled at the callus attitude the City of El Segundo has taken in regards to this Environmental Review. Lives will be negatively impacted and disrupted due to this ill thought out project. Never has there been a project of this scope built in El Segundo west of PCH. It is an encroachment on basic human rights for those of us that have lived decent, honorable lives in this city. I take great offense at being dismissed as a "Less than Significant Impact" in this review. I26-4

A final thought. It was interesting to note the absence of an "artistical conceptional drawing" of this project from the perspective of Indiana St, looking North of Holly Ave. What you would have seen was an object the size of the Queen Mary, towering over the existing residential area to the west. But then again, why would this matter since we are an "unsubstantial number or residents" that will be displaced. I26-5

Paul Morrison
421 Indiana St.
Apt 4
El Segundo, Ca
90245

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Response to Comment Letter I26

Paul Morrison
April 11, 2021

I26-1 This comment is introductory in nature and does not pertain to the adequacy of the environmental analysis in the EIR; no response is required.

I26-2 This comment expresses concerns that proposed Project construction would displace nearby residents. The commenter resides in an apartment building adjacent to the proposed Project. The commenter references the CEQA threshold question from the population and housing analysis, which states "would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?" Because the EIR concluded that impacts would be less than significant in this category, the commenter states that they are considered an "unsubstantial number of existing people." The commenter also expresses concerns with finding replacement housing that is consistent with their current rental rates.

The EIR includes an evaluation of the potential effects of Project construction, including its effects on nearby sensitive receptors (which include adjacent residents). Specifically, impacts of construction air emissions on nearby sensitive receptors are addressed in Section 4.2.4 and were determined to be less than significant after implementation of MM-AQ-1. The impacts of construction noise on nearby sensitive receptors are addressed in Section 4.10.4. As stated therein, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level. As such, mitigation measures have been set forth to address the potentially significant effects of Project construction on residential sensitive receptors.

The commenter references the EIR's population and housing analysis, as it relates to displacement of substantial numbers of existing people or housing. The analysis in the EIR concludes that impacts would be less than significant, because no housing uses are located on the Project site, and Project implementation would not require demolition of existing housing or displace people or housing. The proposed Project would include the construction of a mixed-use development that would add approximately 263 housing units to the City. This threshold does not pertain to construction effects on adjacent residences but rather to environmental effects caused by construction of replacement housing elsewhere. While the commenter expresses concerns regarding the effects of Project construction to adjacent residences, those effects would be mitigated through the mitigation measures set forth in the EIR, as explained in the paragraph above. Furthermore, such effects are temporary and would not necessitate the construction of replacement housing elsewhere. As such, the EIR's conclusion of a less than significant impact is appropriate. Once construction of the Project is complete, construction noise and other temporary effects would no longer occur. Nevertheless, the commenter's concerns regarding construction effects to nearby residents, including the potential for displacement resulting from construction, will be included as part of this Final EIR for review and consideration by decision makers.

I26-3 The received comment expresses opinions and speculations about noise and vibration producing activities associated with Project construction.

The Draft EIR Section 4.10, Noise evaluated construction noise and found it to be a temporary but significant impact at some offsite receptors with respect to construction of some Project elements and thus requiring mitigation that is detailed in MM-NOI-1, which necessitates installation of what will likely be industry-proven sound blanket barriers (or comparably-performing materials) as part of an implemented Construction Noise Mitigation Plan (CNMP) that the City must first review and approve prior to issuance of a demolition or grading permit for the Project. With incorporation of MM-NOI-1, impacts would be less than significant.

I26-4 This comment expresses concerns that tenants in apartment complexes near the Project site will move out during Project construction. The commenter states that these vacancies would then lead to redevelopment of the existing apartments with high-end condominiums. The commenter further states that concluding a "less than significant impact" on the surrounding area seems inaccurate. The commenters states that the proposed Project would negatively impact and disrupt lives.

While the EIR concludes that impacts in the category of population and housing would be below a level of significance, potentially significant impacts are identified to nearby sensitive receptors in other sections of the EIR. For example, the Draft EIR demonstrates that potentially significant impacts to sensitive receptors would occur during construction in the categories of air quality and noise. However, the EIR presents feasible mitigation measures (MM-AQ-1 and MM-NOI-1) for these impacts. Based on the air quality and noise analyses, implementation of these mitigation measures would reduce construction air quality and noise impacts on sensitive receptors to below a level of significance. As such, the EIR considers the impacts of the Project on nearby residential sensitive receptors and has identified mitigation to address these effects.

The commenter's statements regarding potential future apartment vacancies near the Project site are speculative in nature. The Project site and nearby land uses are situated in an urbanized area, within the vicinity of a major roadway (Pacific Coast Highway). Construction impacts to nearby sensitive receptors would be mitigated, as described above. Furthermore, the potential for vacancies is not an environmental topic that is evaluated under CEQA. According to the CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." Nevertheless, the commenter's concerns regarding the future of apartment buildings near the Project site will be included in the Final EIR for review and consideration by decision makers.

I26-5 The commenter notes that a rendering of the Project as viewed from Indiana Street (looking north of Holly Avenue) has not been provided. The commenter states that the Project would appear to be "towering" over the existing residential area to the west.

The west elevations of the proposed Project, as provided in Chapter 2 of the Draft EIR, depict the proposed Project as viewed from Indiana Street. Additionally, the topic of aesthetics and visual effects is analyzed in Section 4.1 of the Draft EIR. This analysis includes a discussion of the Project's potential to adversely affect scenic vistas and a discussion of the Project's consistency with applicable zoning and other regulations governing scenic quality. (It should be noted that effects on private views are not considered impacts on the environment generally under CEQA.) The analysis in Section 4.1 concluded that the proposed Project would not have a substantial, adverse effect to scenic vistas. The analysis also concluded that the Project would be consistent with applicable regulations governing scenic quality. Other topics addressed in the category of aesthetics consist of impacts to scenic resources within a state scenic highway and increased light/glare. Impacts in these categories were determined

to be below a level of significance. Overall, impacts to aesthetics were determined to be less than significant. The appearance of the proposed Project from certain streets within the vicinity of the Project site is not specifically addressed under CEQA, particularly in urban areas. Nevertheless, the commenter's concern regarding the height and massing of the proposed Project as viewed from Indiana Street will be included in this Final EIR for review and consideration by decision makers.

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Comment Letter I27

From: David Poepoe [redacted]
Sent: Sunday, April 11, 2021 9:00 PM
To: Planning; Samaras, Paul
Subject: Regarding the Pacific Coast Commons Development

Follow Up Flag: Follow up
Flag Status: Flagged

April 11th, 2021

To the El Segundo General Planning Committee and City Planner,

We am writing to lodge our vigorous opposition to the planned high density apartment complex on Pacific Coast Highway known as Pacific Coast Commons (PCC). We am not opposed to the construction of affordable housing in El Segundo since we have been encumbered to do so by the State Legislature. We consider that PCC is too large as current proposed to the City and will list our points against it below. I27-1

We will limit our opposition only to the two residential towers under consideration at PCH and Mariposa and PCH and Holly. The construction of the parking structure in place of the shuttered banquet facilities is a reasonable concession. I27-2

1. Both residential towers are too large for the sites. It would be reasonable to limit construction to four stories.

2. Both residential towers have direct access to streets, Indiana and Palm Streets, that are current overtaxed with street parking. The streets are virtually one lane. Adding additional vehicles to either street would be inviting congestion, even if future No Parking restrictions were added to Indiana.

3. Holly and Palm Streets are virtually useless to any individual needing to drive north. Left turns across southbound traffic to go north are impossible and dangerous most times of the day. I27-3

4. Traffic along Washington Street north of Mariposa appears to have not been taken into consideration. Any resident of the north tower not able to turn left onto Mariposa will most likely turn right in order to access Washington Street north to Maple Avenue. This is a route favored by residents and there is no reason to expect it will not be used by others.

5. It is doubtful that consideration was given to traffic that will enter Mariposa from either Kansas or Washington Streets with the development of the former International Rectifier property at Kansas Street and Grand Ave. That is a larger development with only the lighted intersection at Kansas and Grand providing a route out to PCH that does not go thru a residential area. It should be expected that traffic will increase in the morning and afternoons along Kansas and Washington Streets as Mariposa is readily used. In the years before the Pandemic when returning home I frequently saw a line of cars leaving residential El Segundo stretching from PCH to Illinois Street. I27-4

6. Withee Malcom Architects can be thanked with the foresight of widening Mariposa Ave by providing space for a right turn lane from Mariposa onto southbound PCH. However, they should have done the same with providing a dedicated right turn lane from Mariposa into the northern residential tower in order to expedite westbound traffic. I27-5

8. Mariposa Avenue is a major artery for eastern residential El Segundo. The north and south residential towers will only serve to constrict traffic. They will serve as a bottleneck and adversely impact residents across town.

9. The presence of commercial retail space along PCH is quixotic given that it is unlikely that any business would be frequented by El Segundo citizens without public parking. The idea that PCH would become a 'destination place' and 'walkability' is highly questionable. We live on Washington Street and we regularly drive to Ralph's like most of our neighbors. The only people likely to be within a 'walkable' distance are those living on Indiana and Illinois Streets. I27-6

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10. Mar Ventures should be excoriated for their facetious claims on their PCC website of "**We have consistently** heard from El Segundo teachers to people working in our office buildings, all saying the same thing: "**We need new housing close to where we work.**" One thing is to "have heard", another thing would be to commit oneself to doing. There is only a 'proposing' of 13 low income and 13 moderate income dwellings. It is to be expected that should the project be scaled back that the first offerings to be cut would be low- and moderate- income units – or practically anything that would be 'affordable'. The city should extract an irrevocable ironclad commitment from Mar Ventures and Continental Development for a set number of affordable units no matter the eventual size of the housing complex. Affordable housing should be kept no matter the claims of 'hardship' by the developers.
It is not the responsibility of the city government nor should it be the care of the El Segundo community to guarantee that the development be profitable. I27-7

11. It is still too early to clearly foresee where the future of telecommuting will go in the United States. For many companies the request of the continuation of telecommuting has come with cuts in worker pay. How would units at PCC be filled then? Should telecommuting become more widespread why would one need to move into PCC? I27-8

In closing, our recommendation is strictly for a paring down of the proposed scale of the Pacific Coast Commons residential towers. The limitation to four stories is fair and keeps the buildings more in scale with residential El Segundo. Traffic may be manageable with a smaller development. I27-9

Sincerely,

David S. Poepoe
521 Washington Street
El Segundo, CA 90245
dspoepoe@pacbell.net

Stephanie Young
525 Washington Street
El Segundo, CA 90245

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Response to Comment Letter I27

David S. Poepoe and Stephanie Young
April 11, 2021

I27-1 This comment expresses opposition to the proposed Project, cites the housing component as the reason, further specifies the size of the proposed development as reason for concern. The commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

The comment further states detailed reasons for opposition are listed, and, as such, Response to Comments I27-2 through I27-9 are outlined, below.

I27-2 The comment states the two residential towers (PCC-South and PCC-North) are too large for each respective site and suggests the Project should be limited to four stories. In addition, the comment states support for the proposed Project's parking structure to be constructed and replace existing meeting room/event space (banquet rooms) associated with the Fairfield Inn and Suites Hotel. The commenter's support for this provision of the proposed Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

Section 4.1, Aesthetics, of the Draft EIR evaluated the proposed Project's impacts related to aesthetics. As further detailed in Table 4.1-1, Aesthetics Consistency Table, the Project was found to be consistent with the City's General Plan goals and policies regarding density and height. For example, under Policy LU1-1, the Draft EIR stated the proposed Project would increase the height and density of the Project site; however, the Project would not encroach into existing residential areas and thus, would preserve and maintain the City's low medium-density nature in residentially zoned areas. Furthermore, the proposed Specific Plan describes development standards, including proposed heights of the buildings.

Under Chapter 6, Alternatives, of the Draft EIR, three alternatives were considered. Alternative B is proposed with no development north of Mariposa Avenue (PCC-North). Additionally, Alternative C would reduce the proposed height of PCC-South and PCC-North by 10 feet, which is equivalent to one residential level, and would result in each residential building being limited to five stories. Under Alternative C, Level L-5 would not be included in PCC-South and PCC-North, which would remove 25 units and 29 units, respectively. In addition, Level L-5 contains 34 spaces on PCC-South and 39 parking spaces on PCC-North. Thus, parking would be reduced from 336 to 302. Although the commenter's suggestion is to reduce the height of PCC-North and PCC-South to four stories, Chapter 6 of the Draft EIR demonstrates analysis for a reduction in building height.

Therefore, the commenter's suggestion for a reduced height was analyzed in the Draft EIR. The commenter's suggestion to reduce the building height will be provided to City decision makers for their review and consideration as part of this Final EIR.

I27-3 This comment cites existing street parking concerns for surrounding streets (Indiana Street and Palm Avenue). Furthermore, the comment states both streets are limited in lane capacity and raises concern for additional vehicles on the roadway. Additionally, the comment cites Holly Avenue and Palm Streets as surrounding streets with existing traffic congestion on northbound lanes. Lastly, the comment states traffic along Washington Street and Mariposa Avenue were not considered in the environmental

analysis. In particular, the comment raises concern for left-turns from PCC-North and suggests vehicle trip distribution would turn right to access Washington Street and Maple Avenue.

The topic of transportation is evaluated and discussed in Section 4.13, Transportation, of the Draft EIR. A potentially significant impact was identified for Project construction; however, mitigation measure MM-TRA-1 has been set forth and would reduce the impact to below a level of significance, as described and substantiated in Section 4.13. As such, no further mitigation is required for the topic of transportation.

Figure 4.13-5 details Project site access, including access points designated at Indiana Street and Palm Avenue. Figure 4.13-6 provides details on distribution of traffic from the proposed Project and approximately 12% of the Project trips (i.e., approximately 300 daily trips) would be local and would use the adjacent street network such as Indiana Street, Palm Avenue, Washington Street, and Mariposa Avenue. As such, a minor amount of Project-related traffic is expected to use local streets such as Washington Street. For more information on Project trip generation, please see Figures 4.13-7A through Figure 4.13-7C for Project trip assignments generated during peak-hour traffic volumes and lane configurations at analyzed intersections.

I27-4 The comment refers to a development project at Kansas Street and Grand Avenue (also known as related project #33, located at 243 and 330 Kansas Street). A development project at this location was not identified by the City of El Segundo at the time the related projects list was assembled for the Draft EIR's transportation analysis. For discussion regarding an additional related project, see Topical Response No. 1 – Cumulative Impacts, above. In addition, please see Chapter 3, Changes to the Draft EIR, Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

The comment further expresses a concern that traffic generated by this project would use Kansas or Washington Streets through residential neighborhoods north of Grand Avenue. However, the comment notes that the development would have direct access to Pacific Coast Highway through a non-residential area via Grand Avenue. Residential neighborhood streets such as Kansas and Washington Streets provide only one travel lane in each direction whereas Grand Avenue is classified as a secondary arterial and provides two to three travel lanes in each direction. At the intersection of Grand Avenue and Pacific Coast Highway, Grand Avenue provides two eastbound left-turn lanes for vehicles heading northbound on Pacific Coast Highway.

I27-5 The commenter thanks the Project's architect for including widening of eastbound Mariposa Avenue to provide a westbound right lane at the Pacific Coast Highway/Mariposa Avenue intersection. The commenter believes that a dedicated right turn along westbound Mariposa Avenue (west of Pacific Coast Highway) would prevent a traffic bottleneck that could occur due to Project traffic accessing the northern residential tower. The commenter questions why an eastbound right turn lane was not provided at the Indiana Street/Mariposa Avenue intersection.

As shown in Appendix A of the Transportation Impact Analysis (included as Appendix J-1 of the Draft EIR), the AM and PM peak hour traffic turning westbound right from Mariposa Avenue to northbound

Indiana Street is nominal under all scenarios analyzed in the study (with and without proposed Project), and therefore would not warrant an additional turn lane along Mariposa Avenue. The analysis of Indiana Street/Mariposa Avenue intersection shows that the intersection operates under level of service (LOS) B or better, and therefore, no operational effects are anticipated from westbound movements at this intersection. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

I27-6 The commenter states that commercial retail space proposed along Pacific Coast Highway would require public parking in order to be used by City residents. The commenter is concerned that Pacific Coast Highway does not provide a walkable destination to most city residents except for people living along Indiana Street and Illinois Street.

The proposed Project would include public parking for commercial uses on site. As described in Section 4.13, Transportation, spaces would be shared between residential guest parking, commercial use, and for overflow if needed from other sites. See Appendix J-2, Shared Parking Analysis, for more details. Additionally, see Response to Comment I18-4 for assumptions regarding pedestrian trips used in the proposed Project's transportation impact analysis.

I27-7 This comment raises concern for the language used on a website created by the Project applicant as well as notes concern for potential Project revisions that would remove affordable housing units. The comment further suggests the City ensure a set number of affordable housing units be provided under the proposed Project regardless of potential revisions made by City decision makers or the Project Applicant. Chapter 3, Project Description, of the Draft EIR does not specify the number of affordable units within the housing component of the proposed Project. Section 3.3.8, Development Agreement, states the City and the Project applicant will enter into a Development Agreement to ensure a set number of years for Project construction as well as Project benefits, including affordable housing. The full benefits will be negotiated between the parties and will not create any environmental impacts. As such, this comment does not pertain to the adequacy of the environmental analysis in the EIR. Nevertheless, the suggestion will be provided to City decision makers for their review and consideration as part of this Final EIR.

I27-8 This comment states the future of telecommuting for work is unclear and for some companies, workers' pay has been cut. As such, the commenter suggests the proposed Project would not be occupied due to trends in employment. This comment does not pertain to the adequacy of the environmental analysis in the EIR. Furthermore, the comment is speculative and a change which is speculative or unlikely to occur is not reasonably foreseeable. Therefore, no further response is required.

I27-9 This comment repeats the suggestion made in Response to Comment I27-2 and notes impact related to traffic may be reduced with a smaller proposal. As further discussed in Chapter 6 of the Draft EIR and detailed in Table 6-3, impacts under Alternative C (Reduced Development: Reduce 1 Level from PCC-South and PCC-North) would result in similar short-term transportation impacts when compared to the Project, but reduced long-term transportation impacts when compared to the Project. As such, the commenter's suggestion is correct. This comment does not pertain the adequacy of the environmental analysis in the Draft EIR. Nevertheless, the suggestion will be provided to City decision makers for their review and consideration as part of the Final EIR.

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Comment Letter I28

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 11:49 AM
To: Samaras, Paul
Subject: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul,

I'd like to send an email to the city voicing my concerns regarding the Pacific Coast Commons proposal and understand the deadline for these emails is today. Do I send these to you? If not, can you please let me know who to send them to? I didn't see anything on El Segundo's website. I28-1

Thanks
Eli

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Response to Comment Letter I28

Elijah Buck
April 12, 2021

I28-1 This comment presents an email communication to City staff asking how to express concerns related to the proposed Project. The comment was received during the Draft EIR's public review period. Furthermore, another letter was submitted by the commenter, as shown as Response to Comment Letter I29, below. As such, no further response is required.

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Comment Letter I29

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 2:07 PM
To: Samaras, Paul
Subject: Re: Pacific Coast Commons

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Paul,

Thanks for sending that, yes that's very helpful. Below is my letter of concern for the city.

Dear City of El Segundo,

I am writing to you to express my concerns about the Pacific Coast Commons proposal. As a resident on the east side of El Segundo, I am very much against this project and for many reasons. Selfishly, I don't want this project to go through because the 6 floor building would be looming over the private outdoor space we have, take away hours of sunlight and because of the construction. I'd probably have to move because I'm a voiceover actor who records many auditions from home and with the amount of construction noise, I won't be able to record my auditions. Not to mention, once all these apartments are filled, our very quiet complex and the other quiet complexes around us, will be filled with noise from all the new apartments. I29-1

Now those are personal issues, and obviously the city wouldn't say no to a project because of one person (nor would I expect you to), but I'm not just one person. How many other residents lives will be negatively impacted by these massive buildings?

I've attended two of the meetings hosted by the company behind Pacific Coast Commons and in both meetings they said that they are proposing this because they've heard "from many people in the buildings they've built that people want to live closer to work." I'm paraphrasing the quote, but that was the gist of it. I'm wondering if they can provide any sort of documentation to back their motives. A quick look at Apartments.com shows almost 200 apartments available in El Segundo, 250+ in Manhattan Beach, 300+ in Playa Vista. If people really wanted to live close to work, there are plenty of options. Moving forward with a proposal based off "hear say" doesn't seem like a good use of the town's money and space. I29-2

As for the location, I don't know of a single person in town that is looking to move to a more expensive rental unit that's on Sepulveda. Everyone I know that rents wants more affordable housing and this project, based off the renders and the amenities, sounds more like luxury housing, with studios starting around $2000/month as noted in the last presentation. I don't know whose needs in town luxury housing on Pacific Coast Highway would fulfill. Yes, there aren't many new rentals in town, but how many people are getting priced out of El Segundo? Affordable housing would make the current market more competitive. Luxury housing will drive up the market value and rents will continue to rise.

Now traffic is a huge concern. In LA County, there's an average of 2 cars per household, and the proposed 250 or so apartments would put approximately 500 extra cars on the road. And with the PCH location, this leaves only a couple easy access points to major thoroughfares...Mariposa and Grand. 500 additional cars right there would be debilitating to traffic. I know the company behind PCC did their own environmental study, but has the city done their own? I don't know how a single right hand turn lane could be the answer to all the traffic concerns. I think a better idea would be to place buildings throughout the city, spreading out all the cars that will be on the road, giving more options to freeways, etc. I29-3

Looking at Continental Development Corporations website, it's obvious they've done a lot of work around town. And given the amount of buildings they've put up, this proposal seems more opportunistic for Continental Development Corporations than it is beneficial to the town. Are there other bids being considered? I'd think with something this large, the town would definitely be considering other proposals as well. I29-4

I moved to El Segundo in 2013 from New York City and we picked El Segundo because of it's small town feel. There's nowhere else like El Segundo on the west side of town and this proposal feels just like the money-driven proposals that ruined the area we lived in in NYC.

I love this town. I live and work here and look forward to the years ahead here. I ask that you please vote this proposal down, keep El Segundo small, and if you need to have more apartments built in town, keep the buildings small, spread out and affordable. I29-5

Thanks for your time
Eli Buck

1

On Mon, Apr 12, 2021 at 12:53 PM Samaras, Paul <PSamaras@elsegundo.org> wrote:

Hello Mr. Buck,

Yes, you can email me with any comments you have on the project. If you have comments specifically on the draft environmental impact report (EIR) for the project, it will be great if you can send me any comments by the end of the day today. If you do, they will be incorporated and addressed in the final EIR for the project.

For your reference, the following link is to our Active Projects page on the City website, which has information on several projects including the Pacific Coast Commons project

Active Projects | El Segundo

I hope this is helpful. Let me know if you need something else.

Thanks,

Paul Samaras, AICP

Principal Planner

City of El Segundo

From: elijah buck [redacted]
Sent: Monday, April 12, 2021 11:49 AM
To: Samaras, Paul <PSamaras@elsegundo.org>
Subject: Pacific Coast Commons

Hi Paul,

I'd like to send an email to the city voicing my concerns regarding the Pacific Coast Commons proposal and understand the deadline for these emails is today. Do I send these to you? If not, can you please let me know who to send them to? I didn't see anything on El Segundo's website.

2

Thanks

Eli

I29-6

Response to Comment Letter I29

Elijah Buck
April 12, 2021

I29-1 This comment expresses opposition to the proposed Project and cites the proposed buildings' height. Specifically, the commenter is concerned with their property's privacy, shade/shadow impacts, as well as construction and on-site operational noise impacts. The comment further asks about the scope of environmental impacts negatively affecting the nearby residential neighborhood.

Project-related impacts to privacy from private views on the Project site is not required within the scope of the environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

Section 3.1, Aesthetics, of the Draft EIR describes the Project's potential impacts related to shade/shadow effects. Figures 4.1-9A through 4.1-9D illustrate the approximate shade and shadow conditions in the surrounding area created by Project implementation. Shadows cast by the proposed Project were simulated for winter solstice, spring equinox, summer solstice, and fall equinox. As described in Section 3.1, for each shade/shadow scenario illustrated, the duration of shadows cast affecting adjacent uses or property would not be more than three hours. Therefore, the Draft EIR determined the proposed Project would result in less than significant impacts.

Additionally, Section 4.10, Noise, of the Draft EIR, describes the Project's potential impacts related to construction and on-site operational noise to nearby sensitive receptors. The Draft EIR defines noise- and vibration-sensitive land uses as typical locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. As such, sensitive receptors include multi-family homes located immediately to the west and northwest of the Project site. Additional sensitive receptors are located father from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this distance (over 500 feet from the Project boundary) would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

As presented in the Draft EIR, construction noise would result in a temporary but significant noise impact at identified sensitive receptors and require mitigation measures that would need to demonstrate at least 5 dBA and as high as 20 dBA of sound abatement in order to yield Project-attributed construction noise levels that are compliant with this City standard. Typical construction "sound blankets", such as those offered by local suppliers, are capable of providing this 5 to 20 dBA range of acoustical insertion loss (i.e., the difference in measured sound level at a receiver after a sound-occluding element is placed in the direct path between the receiver and the noise source of interest). Thus, with application of MM-NOI-1, construction noise impacts at the nearest multi-family residential properties on the west side of Indiana Street and west side of Phase 2 (PCC-North) would be reduced to a less than significant level.

The incorporation of new multi-family homes and a mix of commercial uses attributed to development of the proposed Project would add a variety of noise-producing mechanical equipment. Project-attributed operational noise at nearby community receptors was assumed to be from exposure to roof-

mounted air-cooled condensing (ACC) units. As such, the Draft EIR analyzed the potential noise impacts and determined less-than-significant impacts would occur to the surrounding residential community.

I29-2 This comment asks for supporting evidence on the proposed Project's housing demand. As shown under Draft EIR Section 4.11, Population and Housing, Table 4.11-7 provides the 6th Cycle Regional Housing Needs Assessment (RHNA) allocation for 2021 to 2029. The City's fair share allocation for the planning period was 491 units at the time of the Draft EIR, but has been recently revised to 492 units (which is the final RHNA allocation).[17] Because the proposed Project will be occupied within the timeframe of the 6th Cycle, it is most relevant to the analysis. As such, between the years 2021 to 2029, the City needs to accommodate at least 492housing units, consisting of a variety of housing types to accommodate extremely low, very low, low, moderate, and above moderate-income households to keep pace with housing demand. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation.

Additionally, Section 4.11 of the Draft EIR evaluates the Project-related impacts to the jobs-housing balance. A jobs/housing balance is a ratio that indicates the number of available jobs in the City compared to the number of available housing units. A balanced community would have a match between employment and housing opportunities so that most of the residents could also work in the community. As indicated in the Draft EIR, according to the City's 2016 housing stock of 7,000 units and the City's 2016 employment numbers of 48,300 jobs, the City maintained a 6.9:1 jobs to housing ratio in the City, which translates to being a jobs-rich community. The proposed Project would generate additional housing available for the community, as the jobs-housing balance of the proposed Project would be 0.3:1, which is a very housing-rich project. Therefore, the proposed Project would facilitate a more balanced jobs-housing profile for the City.

The comment further states concern for the Project's potential cost per housing unit and assumes potential "luxury apartments" would result in an increase of the local rents in the City. This comment is speculative and a change which is speculative is not reasonably foreseeable. Furthermore, according to the State CEQA Guidelines, Section 15064(e) "economic and social changes resulting from a project shall not be treated as significant effects on the environment." The Project's impact on the surrounding rents is not within the scope of required environmental analysis. Therefore, this comment does not contain any specific concerns related to the adequacy of the environmental analysis in the Draft EIR. No changes or additions to the project description or environmental document are required in response to this comment.

I29-3 This comment is concerned about Project-related traffic onto Mariposa Avenue and Grand Avenue. The topic of transportation is evaluated and discussed in Section 4.13 of the Draft EIR, including analysis related to vehicle trips on Mariposa Avenue and Grand Avenue. As shown in Table 4.13-1, the Project overall is projected to generate an estimated net increase of 2,517 daily trips, including 132 trips (47 inbound/85 outbound) during the AM peak hour and 178 trips (103 inbound/75 outbound) during the PM peak hour. The comment raises concern for Project-related trip distribution and assignment and

[17] The addition of one dwelling unit to the City's RHNA allocation since the time of the Draft EIR does not constitute significant new information requiring recirculation of this EIR, per CEQA Guidelines Section 15088.5. Please see Chapter 3 of the Final EIR for more discussion.

asks how a right-turn lane would answer traffic concerns. Although the commenter was not specific on the vehicle trip distribution concern, the Draft EIR concluded a potentially significant impact would occur during Project construction; however, with the implementation of mitigation measure MM-TRA-1, impacts would be reduced below a level of significance. As such, no further mitigation is required for the topic of transportation under CEQA.

The comment further asks if the City conducted the environmental analysis for the proposed Project, specifically related to traffic. The contents of the Draft EIR and its environmental analysis (including Section 4.13, Transportation) was prepared by Dudek, a private consultant, for the City of El Segundo. Additionally, information contained in Section 4.13 is based on a Transportation Impact Analysis (TIA) prepared by Fehr & Peers (included as Appendix J-1) as well as a Shared Parking Analysis prepared by Fehr & Peers (included as Appendix J-2). Preparation of the transportation analysis by Fehr & Peers occurred under the direction of, and on behalf of, the City. Fehr & Peers are experts in the field of transportation planning and engineering, land use and transportation analyses, and traffic/transportation impact analyses. In addition, both the TIA and Shared Parking Analysis were peer reviewed by Dudek and were also reviewed and approved by the City planning staff. As such, the environmental analysis presented in the Draft EIR, including the traffic analysis, has been conducted and reviewed by a team of industry professionals and experts. Furthermore, the Draft EIR has been prepared in conformance with the substantive and procedural requirements of CEQA and the CEQA Guidelines. All conclusions in the Draft EIR are supported by substantial evidence (including facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts), as defined in Section 15384 of the CEQA Guidelines.

The comment suggests the proposed buildings should be spread out throughout the City. An alternative location for the proposed Project was considered as part of the discussion within Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process. Pursuant to Section 15126.6(f)(2) of the CEQA Guidelines, the City considered the potential for alternative locations to the Project. As stated in Section 15126.6(f)(2)(A), the Draft EIR shall analyze alternative sites based on whether or not any of the Project's significant effects would be avoided or substantially lessened by putting that Project in another location. However, there are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that required mitigation. Furthermore, only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR and other sites were determined to be infeasible because no such sites are under control by the Project applicant.

I29-4 This comment asks if the City is considering other proposals for the Project site. Chapter 6, Alternatives, of the Draft EIR describes and evaluates alternatives to the Pacific Coast Commons Specific Plan. This discussion includes Section 6.4, Alternatives Considered and Eliminated During the Project Planning Process, which evaluated the potential for alternative locations; Section 6.5, Alternatives Selected for Further Analysis, which identified three alternatives to the proposed Project; and Section 6.7, Environmental Superior Alternative, which designated Alternative B as such. It is further noted that the Project site is privately owned property; as such, the City does not collect bids for development on the site. The property owner has submitted an application for development of their property to the City, and that application is being evaluated as required under CEQA in this EIR.

I29-5 This comment expresses opposition to the proposed Project and states potential apartments in El Segundo should be small, spread out, and affordable. This comment does not pertain to the adequacy of the environmental analysis in the EIR. Additionally, the commenter's general opposition to the Project will be provided to the decision makers for their review and consideration as part of this Final EIR.

I29-6 This comment presents an email communication between the commenter and City staff. As indicated above in Response to Comment Letter I28, the commenter asks how to participate in the Draft EIR's public review. City staff responded and provided resources on where the Draft EIR was available and how to comment. Therefore, no further response is required.

Comment Letter I30

From: Gayle CdeBaca [redacted]
Sent: Monday, April 12, 2021 5:10 PM
To: Samaras, Paul
Subject: PCC project comments

Paul-

I have questions about the PCH housing project. I reviewed the traffic report but couldn't find the answers.

I would like to know how the following items are being addressed:

1) Traffic flow from Indiana Ct and Indiana to Mariposa. Right now turning left onto Mariposa is very dangerous as you can't see past the cars lined up waiting at the light.
2) Traffic flow into and out of 76 gas station. Right now only one car can enter or exit at a time. When a car is trying to enter while another is waiting to exit, all of the traffic behind the waiting cars back up and often block PCH.
3) Current traffic back up on Mariposa. In a normal non-Covid environment, cars waiting at the light at PCH, back up past Washington St. This is especially bad during school pick up and drop off times. While I understand a new right turn lane is being added, only 1-2 cars will be able to move into that lane and will not relieve the current congestion issue.
4) Has the number of cars in this area actually been tracked over a period of weeks? If so, does it also take into account that these are not normal traffic times?
5) At this time, hotel and high rise employees typically park on the resident streets in and around Mariposa. How is this going to be prevented going forward? The plans don't appear to have enough parking for all the new residential and retail spaces.
6) If this project goes thru, where will all of the construction workers park? The current project on Indiana is displacing a lot of residents and they are lined up along adjacent streets too.

I30-1

I appreciate your feedback on these items.

Gayle CdeBaca

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Response to Comment Letter I30

Gayle CdeBaca
April 12, 2021

I30-1 This comment addresses multiple items regarding the transportation analysis and comments on their current understanding of the existing traffic at Mariposa Avenue and Pacific Coast Highway. The comment states that turning left onto Mariposa Avenue from Indiana Court is dangerous as cars are lined up from Mariposa Avenue and Pacific Coast Highway. It is unclear exactly why this movement would be considered dangerous; when turning left onto Mariposa Avenue, vehicles approaching from both directions on Mariposa Avenue would be visible. Additionally, there is no Indiana "Court" that intersects Mariposa Avenue. Instead, there is Indiana "Street" and "Illinois" Court that are proximate to each other. Based on the existing pavement markings/striping and "No Stopping" signage on the north side of Mariposa Avenue, there is adequate sight distance for vehicles to maneuver to and from those streets to Mariposa Avenue. Furthermore, once the Project constructs the new right-turn lane on Mariposa Avenue, there will be less congestion on the eastbound approach of Mariposa Avenue, thereby further improving existing congestion. This comment also states that vehicles are backed up and block Pacific Coast Highway when a vehicle is exiting the gas station at the corner of Mariposa Avenue and Pacific Coast Highway. While this behavior was not observed during site visits to the field, it is a pre-existing condition that is not caused by the Project.

Overall, intersections that currently operate at Level of Service (LOS) E (considered to be poor intersection operations) or worse would continue to operate at LOS E or worse with the addition of Project traffic. Refer to Tables 6A and 6B in Appendix J-1 of the Draft EIR for a comparison of existing LOS at Project area intersections to LOS with the addition of Project traffic. The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only related to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1), because automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)).

For an updated assessment of LOS as it relates to the addition of three related projects, please refer to Topical Response No. 1- Cumulative Impacts. In summary, the addition of the three related projects is anticipated to change the LOS of the intersection at Pacific Coast Highway/El Segundo Boulevard in the AM peak hour from LOS D to LOS E. Prior to the addition of these related projects, this intersection was forecast to operate at LOS D in the AM peak hour. Therefore, with the addition of the three related projects, this intersection is forecast to operate at LOS E in the AM peak hour for both the Future (No Project) and Future plus Project scenarios. This changed future LOS condition would occur with or without the proposed Project. Importantly, the addition of the proposed Project would not individually contribute to an LOS change from the pre-Project condition. In summary, the addition of the three related projects would not result in the Project creating adverse circulation conditions regarding trips generated on the street network.

This comment also expresses concerns that the right-turn lane that will be added to Mariposa Avenue and Pacific Coast Highway as a part of the Project will not relieve the current congestion issue. As described above, the Draft EIR includes an informational analysis which shows that the intersection of

Mariposa Avenue and Pacific Coast Highway operates at LOS C under existing conditions (acceptable according to City of El Segundo standards) and LOS C/D under future base conditions. This intersection is also projected to operate at LOS C/D with the addition of the proposed Project. Its operations would be improved with the Project as an eastbound right-turn lane will be added to the intersection as a project feature. This right-turn lane is projected to improve capacity at this intersection from 78% capacity during the AM peak hour and 88% capacity in the PM hour without the Project to 75% capacity in the AM peak hour and 86% capacity in the PM peak hour with Project and right-turn lane. The addition of a dedicated right-turn lane will separate cars wanting to make a right-turn from through traffic and thus will increase the capacity of the intersection.

The comment asks if existing traffic conditions were recorded over a period of weeks. As described in Appendix J-1 of the Draft EIR, existing traffic counts taken for a traffic analysis are taken on a non-holiday weekday (Tuesday, Wednesday, or Thursday) during school years to represent typical traffic conditions. Counts for the proposed Project were taken in May and October of 2019, which were representative of typical pre-COVID traffic conditions.

The comment further asks about employee parking on site. The Shared Parking Analysis (Appendix J-2 in the Draft EIR) indicates that there would be sufficient parking for all uses that are part of the Project and therefore the need for overflow parking is not anticipated. As described in the study, and if desired by neighborhood, the developer plans to work with residents to suggest the boundaries of this potential permit parking district. A permit parking district would be implemented by the City at the request and approval of the residents and would allow potentially only residents to park on the street.

Lastly, the comment asks about parking availability for construction workers. As part of the Shared Parking Analysis (pages 15 through 18 of Appendix J-2 in the Draft EIR), Project construction parking analysis was also conducted to understand the parking needs of construction employees and uses on-site. Two timelines were analyzed. The sequential construction timeline analysis shows that parking for all construction employees could be accommodated on-site through all phases of construction. The concurrent construction timeline shows that parking for construction employees could be accommodated on site during Phase 1. During Phases 2 and 3, sufficient off-site parking with transport to and from the Project site would be provided for hotel guests and employees, and construction employees. The location of the off-site parking would be determined at the time based on market conditions and availability.

Comment Letter I31

From: Stephanie Jordon [redacted]
Sent: Monday, April 12, 2021 12:29 AM
To: Planning
Subject: High density apartments

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Paul,

I Brenton C Graham @ 1630 e palm Ave

Unit 08 El Segundo , Ca have Air rights.

The parking structure would be blocking my

View of the mountains and the view of PCH.

I did not purchase my property 25 years ago

To look at a parking structure. This is not

An eminent domain situation.

Sent from my iPhone

I31-1

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Response to Comment Letter I31

Stephanie Jordon and Brenton C. Graham
April 12, 2021

I31-1 This comment presents the same letter as shown in Response to Comment Letter I12, above. As such, please see Response to Comment Letter I12. No further response is required.

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Comment Letter I32

From: Lionel Uhry [redacted]
Sent: Monday, April 12, 2021 3:24 PM
To: Samaras, Paul
Subject: Pacific Coast Commons EIR Comment Letter
Attachments: Pacific Coast Commons EIR comment letter-April-12-2021.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Paul,

Please find attached our comment letter to the Pacific Coast Commons EIR. I32-1

Thank you,
Lionel

Please note Mar Ventures continues to work a blended office and work from home schedule. We continue to have access to emails and appreciate your patience in our response times.

LIONEL UHRY | SENIOR VICE PRESIDENT
DRE LIC# 01752589
ACQUISITIONS & DEVELOPMENT
MAR VENTURES, INC.
721 NORTH DOUGLAS STREET
EL SEGUNDO CA 90245
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1

April 12, 2021

Paul Samaras, Principal Planner
City of El Segundo
Development Services Department
350 Main Street
El Segundo, CA 90245

RE: Comments Regarding Pacific Coast Commons Project EIR (Case No. EA-1248)

Dear Mr. Samaras,

I am submitting the following comments to the Pacific Coast Commons Project EIR and request that these items be corrected in the Final EIR.

Comments/Revisions

1. **Executive Summary, Page 34:** Typographical error. 18 individuals should state 118 individuals.
2. **Chapter 1 (Introduction), page 1-5; Chapter 3 (Project Description), page 3-20; Chapter 4, Section 9 (Land Use), page 4.9-33:** The code section for the Zone Text Amendment to add the PCC Specific Plan to the El Segundo Municipal Code should be corrected in each of these sections to read "ESMC Section 15-3-2(A)(12)" instead of "ESMC Section 15-3-2(A)(11)" because the Lakes Specific Plan was adopted by the City of El Segundo during the preparation of the PCC Specific Plan. This will be corrected in the Specific Plan as well.
3. **Chapter 1 (Introduction), page 1-5:** The last sentence in the bullet regarding improvements to Holly and to Palm Avenues being provided through irrevocable offers to dedicate land should be deleted as the dedications are being provided now.
4. **Chapter 2 (Environmental Setting), Page 29):** Plan dates should be corrected throughout the EIR to be consistent with the plans used in the EIR which is January 2021. (See the end of Chapter 2; page 2-9, and the end of Chapter 3.8.). I32-2
5. **Chapter 3 (Project Description), pages 3-8 through 3-9**: Information regarding the new right turn lane on Mariposa Avenue should be added to the project description.
6. **Chapter 4, section 1 (Aesthetics), page 4.1-7; Chapter 4, Section 5 (Geology and Soils), page 4.5-10:** The year referenced for the California Building Code in each of these corrections should be corrected to read "2019" rather than "2016".
7. **Chapter 4, Section 3 (Cultural Resources), page 4.3-4:** the intersection reference to "Lincoln and Grand Avenues" should be corrected to "Pacific Coast Highway and Grand Avenue."
8. **Chapter 4 Section 9 (Land Use), page 4.9-6:** The date referenced for the Circulation Element should be 2004 not 1992. The 2004 update is posted on the City's website.
9. **Chapter 4, Section 11 (Population and Housing), page 4.11-16:** Correct the number of residential units in the chart at the top of the page from 236 to 263 units.
10. **Chapter 4, Section 13 (Transportation), page 4.13-22:** the building height in the last bullet – should read 63 feet.

Please do not hesitate to contact me with any questions regarding the above comments.

Sincerely,

Lionel Uhry
Sr. Vice President
Mar Ventures

Response to Comment Letter I32

Mar Ventures, Inc.
Lionel Uhry
April 12, 2021

I32-1 This comment presents an email communication indicating an attached letter (included as Response to Comment I32-2) is provided. No further response is required.

I32-2 This comment, provided by the Project applicant, is comprised of a requested list for revisions to be corrected in the Final EIR. The corrections have been reviewed and accepted. Please see Section 3.2, Errata, of this Final EIR. These revisions provide additional details and clarification of the information that was originally presented in the Draft EIR. These edits have not changed the impact conclusions in the Draft EIR, nor have they revealed a need for new or altered mitigation measures. Rather, this information merely clarifies information and conclusions that were already presented in the Draft EIR. As such, these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact and, therefore, do not warrant recirculation of the Draft EIR.

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SECTION PAGE NO.

2 RESPONSES TO COMMENTS 1
2.1 Introduction 1
2.2 Topical Responses 2
Response to Comment Letter A1 15
Response to Comment Letter O1 19
Response to Comment Letter O2 29
Response to Comment Letter O3 33
Response to Comment Letter O4 37
Response to Comment Letter I1 41
Response to Comment Letter I2 45
Response to Comment Letter I3 49
Response to Comment Letter I4 53
Response to Comment Letter I5 57
Response to Comment Letter I6 61
Response to Comment Letter I8 71
Response to Comment Letter I9 75
Response to Comment Letter I10 79
Response to Comment Letter I11 83
Response to Comment Letter I12 87
Response to Comment Letter I13 91
Response to Comment Letter I14 95
Response to Comment Letter I15 99
Response to Comment Letter I16 103
Response to Comment Letter I17 107
Response to Comment Letter I19 119
Response to Comment Letter I20 123
Response to Comment Letter I21 205
Response to Comment Letter I23 277
Response to Comment Letter I24 281
Response to Comment Letter I28 303
Response to Comment Letter I30 313
Response to Comment Letter I31 317

Appendices

A Insert Title
B Insert Title

Figures

No table of figures entries found.Tables

Table 2-1. List of Commenters....1
Table 2-2. Additional Related Projects....3
Table 2-3. Draft EIR Future (2027) Plus Project Intersection LOS Signalized Intersections....9
Table 2-4. Revised Future Plus Project Intersection LOS Signalized Intersections....10
Table 2-5. Off-Site Roadway Traffic Noise Modeling Results....211
Table 2-6. Measured Existing Outdoor Ambient Sound Pressure Levels (SPL) in Project Vicinity....221

Pacific Coast Commons Specific Plan
Final Environmental Impact Report
Responses to Additional Comments Received

State Clearinghouse No. 2020050508

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245

Prepared by:

DUDEK
38 North Marengo Avenue
Pasadena, California 91101

FEBRUARY 2022

Printed on 30% post-consumer recycled material.

Table of Contents

SECTION **PAGE NO.**

SECTION 1. INTRODUCTION 1

SECTION 2. COMMENT LETTERS 3

Comment Letter 1 3
Response to Comment Letter 1 267
Comment Letter 2 295
Response to Comment Letter 2 599

SECTION 3. VERBAL COMMENTS 603

Verbal Comment 1 603
Response to Verbal Comment 1 605
Verbal Comment 2 607
Response to Verbal Comment 2 609
Verbal Comment 3 611
Response to Verbal Comment 3 613
Verbal Comment 4 615
Response to Verbal Comment 4 617
Verbal Comment 5 619
Response to Verbal Comment 5 621
Verbal Comment 6 625
Response to Verbal Comment 6 627
Verbal Comment 7 629
Response to Verbal Comment 7 631

TABLES

1 List of Comment Letters Received 1
2 List of Verbal Commenters 1

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Section 1. Introduction

All comment letters received by the City of El Segundo ("City") through December 9, 2021 have been included and responded to herein. Comments that raise environmental issues pertinent to the analysis presented in the EIR have been thoroughly addressed in these responses. The City received comment letters from two organizations prior to the City's Planning Commission meeting on December 9, 2021, and verbal comments were also presented at the meeting.

For the new comment letters received, individual comments within the body of each letter have been identified and numbered. Brackets delineating the individual comments and a numeric identifier have been added to the right margin of the letter. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 1 lists the comment letters received, including the commenting organization's name; the assigned numbering; and the date of the correspondence for responses provided in Section 2, Written Comments.

Table 1. List of Comment Letters Received

Comment Letter	Name	Type	Date
1	Southwest Regional Council of Carpenters (via Mitchell M. Tsai, Attorney at Law)	Organization	December 8, 2021
2	Supporters Alliance for Environmental Responsibility ("SAFER", via Lozeau Drury LLP)	Organization	December 9, 2021

Members of the public who attended the City's Planning Commission meeting on December 9, 2021 were also given opportunities to provide verbal comments. The individuals that provided comments are listed in Table 2. Written transcriptions of the verbal comments are provided, with brackets delineating the individual comments and a numeric identifier have been added to the right margin. Responses to each bracketed comment are included on the page(s) following each comment letter. Table 2 lists the commenters from the City's Planning Commission meeting on December 9, 2021 and the assigned numbering for responses provided in Section 3, Verbal Comments.

Table 2. List of Verbal Commenters

Comments	Name	Type	Date
1	Nino Mascolo	Individual	December 9, 2021
2	Byron Washum	Individual	December 9, 2021
3	Ray Lawson (Southwest Regional Council of Carpenters)	Individual	December 9, 2021
4	Paul Morrison	Individual	December 9, 2021
5	Amalia Fuentes - Supporters Alliance for Environmental Responsibility ("SAFER")	Individual	December 9, 2021
6	Maria Barron	Individual	December 9, 2021
7	Matthew Klemp	Individual	December 9, 2021

As presented in Sections 2 and 3 below, none of the comment received identified deficiencies in the Draft or Final EIR analyses that would require recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5.

CEQA Guidelines Section 15088.5, Recirculation of an EIR Prior to Certification, is presented below for reference:

(a) A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before

certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, 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. (*Mountain Lion Coalition v. Fish and Game Com.* (1989) 214 Cal.App.3d 1043)

Although no comments have been raised that would require revisions to the Final EIR, these comments are available to the City's decision makers for their review and consideration as part of their deliberations on the Project's environmental documentation.

Comment Letter 1

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Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

December 8, 2021

El Segundo Planning Commission
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: planning@elsegundo.org

RE: Agenda Item No. H-1: Pacific Coast Commons Specific Plan Project

Dear Chair Baldino and Honorable Commissioners,

On behalf of the Southwest Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWRCC**"), my Office is submitting these comments on Agenda Item No. H-1 for the November 18, 2021 City Planning Commission Meeting for the City of El Segundo's ("**City**" or "**Lead Agency**") Final Environmental Impact Report ("**FEIR** or **DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project. The Project proposes to demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

1-1

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

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

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearings and proceedings related to this Project. Cal. Gov. Code § 65009(b); Cal. Pub. Res. Code § 21177(a); *Bakersfield*

Citizens for Local Control v. Bakersfield (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

SWRCC incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *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). 1-1 Cont.

Moreover, SWRCC requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and 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. 1-2

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements 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 providing localized economic benefits. 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 providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note: 1-3

> [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.

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

> . . . labor 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]

Recently, on May 7, 2021, the South Coast Air Quality Management District found that the "[u]se of a local state-certified apprenticeship program or a skilled and trained workforce with a local hire component" can result in air pollutant reductions.[2]

Cities are increasingly adopting local skilled and trained workforce policies and requirements into general plans and municipal codes. For example, the City of Hayward 2040 General Plan requires the City to "promote local hiring . . . to help achieve a more positive jobs-housing balance, and reduce regional commuting, gas consumption, and greenhouse gas emissions."[3]

1-3 Cont.

[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

[3] City of Hayward (2014) Hayward 2040 General Plan Policy Document at p. 3-99, *available at* https://www.hayward-ca.gov/sites/default/files/documents/General_Plan_FINAL.pdf.

In fact, the City of Hayward has gone as far as to adopt a Skilled Labor Force policy into its Downtown Specific Plan and municipal code, requiring developments in its Downtown area to requiring that the City "[c]ontribute to the stabilization of regional construction markets by spurring applicants of housing and nonresidential developments to require contractors to utilize apprentices from state-approved, joint labor-management training programs, . . ."[4] In addition, the City of Hayward requires all projects 30,000 square feet or larger to "utilize apprentices from state-approved, joint labor-management training programs."[5]

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 communities and their vehicle trips would be shorter. Benefits would include potential reductions in both vehicle miles traveled and vehicle hours traveled.[6]

In addition, local hire mandates as well as skill training are critical facets of a strategy to reduce vehicle miles traveled. As planning experts Robert Cervero and Michael Duncan noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions since the skill requirements of available local jobs must be matched to those held by local residents.[7] Some municipalities have tied local hire and skilled and trained workforce policies to local development permits to address transportation issues. As Cervero and Duncan note:

> 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

1-3 Cont.

[4] City of Hayward (2019) Hayward Downtown Specific Plan at p. 5-24, *available at* https://www.hayward-ca.gov/sites/default/files/Hayward%20Downtown%20Specific%20Plan.pdf.

[5] City of Hayward Municipal Code, Chapter 10, § 28.5.3.020(C).

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

[7] 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.

> 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.

1-3 Cont.

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

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations (**"CCR"** or **"CEQA Guidelines"**) § 15002(a)(1).[8] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. 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.

1-4

[8] 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. (Cal. 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. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

App. 4th 1344, 1354 (*"Berkeley Jets"*); *County of Inyo v. Yorty* (1973) 32 Cal. App. 3d 795, 810.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The 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(a)(2). 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 CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

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.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). 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. Cnty. 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 court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A 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.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. 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. For the EIR to serve these goals it must present information so that the foreseeable impacts of pursuing the

1-4 Cont.

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. *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).

1-4 Cont.

B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" 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)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

1-5

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency

is required to revise and recirculate that information as part of the environmental impact report.

Here, the City has made significant revisions to the Draft EIR which are detailed in the FEIR beginning on page 3-1 of that document. These revisions require recirculation of the EIR for an additional public comment period. These are not minor non-substantive revisions.

The City has significantly altered its transportation and cumulative impacts analyses. The City has now added three additional related projects and attached them to the FEIR as Appendix A in the *Revised Future Analysis*. As a result, all related impacts are substantially altered and the EIR needs to be recirculated to allow for adequate public review and comment. The City has changed its transportation analysis as it relates to trip generation, traffic volume, and level of service analysis. (See FEIR, Appendix A.) These changes are accompanied by dozens of pages of expert data analysis that cannot be left to the public for a last-minute glance.

1-5 Cont.

C. The FEIR Failed to Respond to SWRCC's and Expert's Comments

CEQA requires that a lead agency "evaluate comments on environmental issues received from persons who reviewed the draft EIR" and provide a written response with good faith and reasoned analysis. CEQA Guidelines § 15088. The responses are required to be provided in a revision to the draft EIR or in a separate section in the final EIR. *Id.*

SWRCC submitted comments to the DEIR on April 12, 2021 addressed to Planner Paul Samaras. Upon review of the FEIR, it does not appear that the City responded to or considered SWRCC's comments. Those comments are attached hereto as Exhibit A for the City's renewed consideration. A copy of the e-mail where my Office transmitted these comments are attached as Exhibit B.

1-6

III. **CONCLUSION**

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

1-7

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

April 12, 2021 SWRCC Letter to Paul Samaras and Exhibits (Exhibit A); and

April 12, 2021 E-mail from Leon Ramsey Jr, Mitchell M. Tsai, Attorney at Law to Paul Samaras (Exhibit B).

1-7
Cont.

EXHIBIT A

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Mitchell M. Tsai
Attorney At Law

155 South El Molino Avenue
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Pasadena, California 91101

VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

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

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

1-8

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

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *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).

1-8 Cont.

Moreover, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and 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.

1-9

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements 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 providing localized economic benefits. 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,

1-10

reduce greenhouse gas emissions and providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [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.

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

> . . . labor 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]

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

1-10 Cont.

I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

1-11

[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

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, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, 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, particular 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

1-11 Cont.

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.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

1-11 Cont.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. 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.

1-12

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

[2] 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. (Cal. 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. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The 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(a)(2). 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 CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

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.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). 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. Cnty. 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 court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A 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.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. 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. 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. *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).

1-12 Cont.

B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" 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)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

1-13

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. 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.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency 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 SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency 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.

1-14

[3] 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.

- 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.

1-14 Cont.

- 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.[4]

1-14 Cont.

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 Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

1-15

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions 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.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

1-15 Cont.

Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

1-15 Cont.

(DEIR, ES-10~16.)

E. The DEIR Fails to Support Its Findings with Substantial Evidence

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 EIR 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* (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

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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).

1-16 Cont.

1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

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).

1-17

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 CAPs 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;

(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;

1-17 Cont.

Collectively, the above-listed CAP 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.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

1-17 Cont.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

1-18

(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts. 1-18 Cont.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT. 1-19

The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the 1-20

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

1-20 Cont.

F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

1-21

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

1-21 Cont.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

A. Background Regarding the State Planning and Zoning Law

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 (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 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." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

1-22

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

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B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

1-23

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

1-23 Cont.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

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CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

The DEIR should be revised and recirculated with an affordable housing component.

1-24 Cont.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

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);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

1-25
Cont.

EXHIBIT A

SWAPE 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.

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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.

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):

> "$\text{Emissions}_{pollutant} = VMT * EF_{running,pollutant}$
>
> Where:
>
> $\text{Emissions}_{pollutant}$ = 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.

1-26 Cont.

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**

1-26 Cont.

[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.

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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_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/year)	100.80
% Decrease in Construction-related GHG Emissions	***17%***

1-26 Cont.

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.aqmd.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.

1-26 Cont.

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

EXHIBIT B

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

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.

1-27

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 H_2O 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

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1-27 Cont.

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). Perfluoroctanoic Acid (PFOA) and Perfluoroactane 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.

1-27 Cont.

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 Florala, 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.

1-27 Cont.

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.

1-27 Cont.

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.

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

1-27 Cont.

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 Agrosciences, 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
Warrn 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

1-27 Cont.

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

1-27 Cont.

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

1-27 Cont.

EXHIBIT C

SWAPE 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

1-27 Cont.

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);

- 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.

1-27 Cont.

- 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.

1-27 Cont.

- 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.

1-27 Cont.

- 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.

1-27 Cont.

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.

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, Coloradao.

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.

1-27 Cont.

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1-27 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

EXHIBIT D

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April 12, 2021

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Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site.

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

1-28

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] 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

1-29

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

1-29 Cont.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

1-30

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

1-31

[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

1-31 Cont.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

1-32

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

1-32 Cont.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

1-33

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

1-33 Cont.

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

1-34

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-34 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

1-35

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

7

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

1-35 Cont.

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

1-36

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

1-36 Cont.

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

9

Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

1-37

As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

1-37 Cont.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

1-38

However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

1-39

[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

1-40

[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

13

project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

1-40 Cont.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

1-41

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

1-41 Cont.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

1-42

[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

1-42 Cont.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

1-42 Cont.

[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

17

concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

1-42 Cont.

[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

1-42 Cont.

[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1-43

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

1-44

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

1-45

[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

1-45 Cont.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

1-46

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

1-46 Cont.

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

1-47

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

1-47 Cont.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

1-48

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

1-48 Cont.

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

25

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

1-48 Cont.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

1-48 Cont.

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

1-49

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones.

1-49 Cont.

28

Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

1-49 Cont.

29

• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

1-49 Cont.

30

• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

1-49 Cont.

31

Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

1-49 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

32

Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

1-49 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

33

ii. The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level. iii. The Certification Statement signed and printed on the contractor's letterhead.	
b. The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify: 1. Source of supply 2. Quantity of fuel 3. Quality of fuel, including sulfur content (percent by weight)	1-49 Cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. 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. 1-50

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	2.83				4.2E-06
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	30.25			**Lifetime Exposure**	7.9E-05

1-51

Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
		Total Emissions From Passenger and Light Duty Vehicles
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) [Calc: (L1*L2)]
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) [Calc: (L3 converted into lbs) / (365 days)]
5	674	Service Population [618 residents + 56 long-term jobs]
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) [Calc: (L4/L5)]
		Daily VMT Per Capita From Passenger and Light Duty Vehicles
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles [Calc: (L9/365)]
11	674	Service Population [618 residents + 56 long-term jobs]
12	24.14	Daily VMT Per Capita [(Calc: L10/L11)]

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks,	
Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

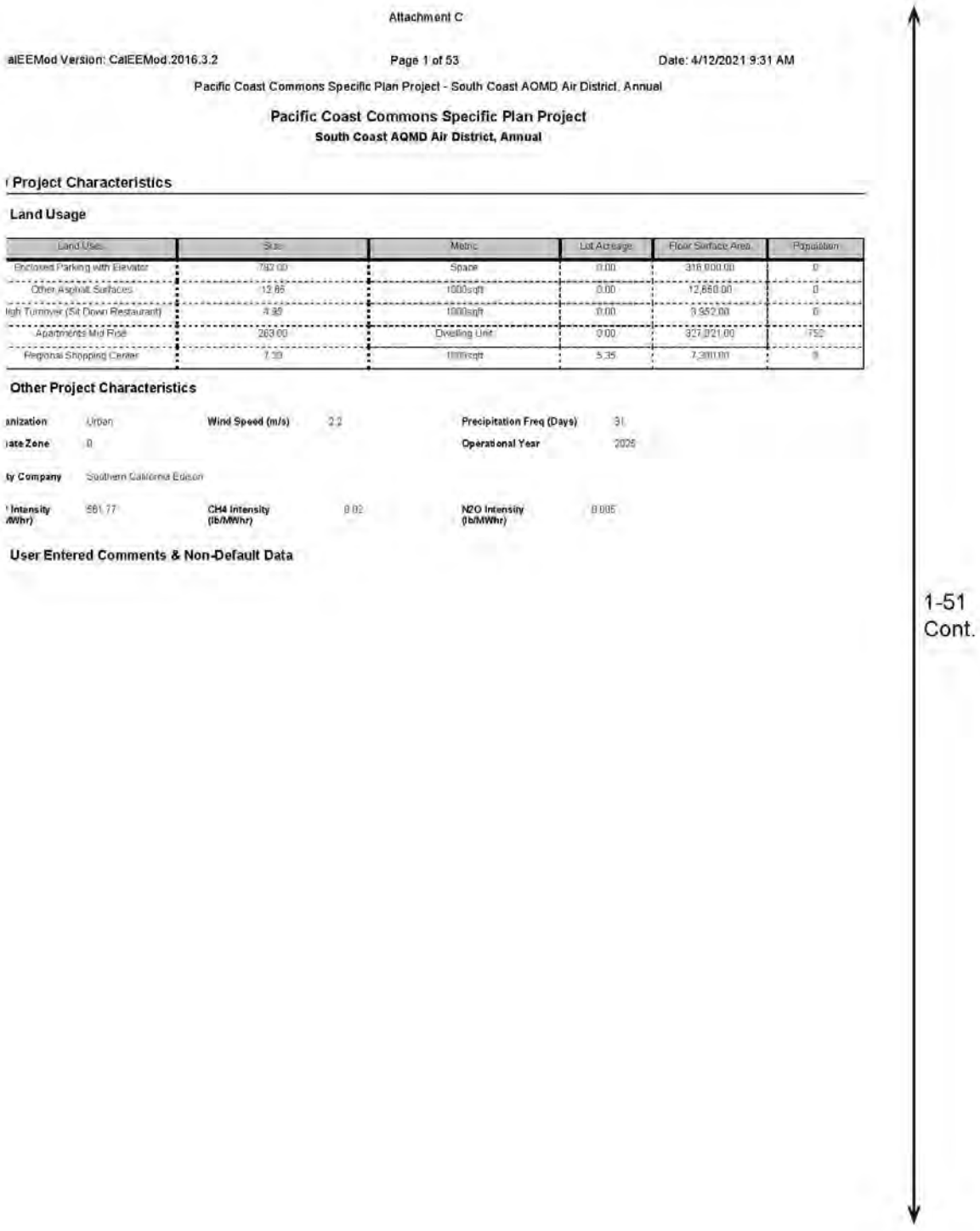
1-51 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

1-51 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes



Attachment C

alEEMod Version: CalEEMod.2016.3.2 Page 1 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Annual

Project Characteristics

Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
igh Turnover (Sit Down Restaurant)	4.35	1000sqft	0.00	4,352.00	0
Apartments Mid Rise	263.00	Dwelling Unit	9.00	327,921.00	752
Regional Shopping Center	7.39	1000sqft	5.35	7,390.00	0

Other Project Characteristics

anization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
ate Zone	8			Operational Year	2025
ty Company	Southern California Edison				
l Intensity /MWhr)	561.77	CH4 Intensity (lb/MWhr)	0.02	N2O Intensity (lb/MWhr)	0.005

User Entered Comments & Non-Default Data

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	282.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

1-51 Cont.

tblVehicleTrips	SU_TR	5.05	5.04
tblVehicleTrips	SU_TR	131.04	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstovesDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1147	1.1620	0.7437	1.6700e-003	0.3852	0.0626	0.4077	0.1937	0.0486	0.2122	0.0000	150.2969	150.2969	0.0339	0.0000	151.1444
2022	1.3593	2.3980	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0970	0.0983	0.1953	0.0000	532.1323	532.1323	0.0866	0.0000	534.2970
2023	0.3882	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8981	832.8981	0.1113	0.0000	835.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8981**	**832.8981**	**0.1113**	**0.0000**	**835.6806**

1-51 Cont.

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	0.1147	1.1622	0.7435	1.6700e-003	0.3552	0.0526	0.4077	0.1637	0.0485	0.2122	0.0000	160.2959	160.2959	0.0039	0.0000	161.1442
2022	1.3593	2.3850	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1320	532.1320	0.0886	0.0000	534.2966
2023	0.3592	2.9109	3.2200	9.1600e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	832.8977	832.8977	0.1113	0.0000	835.6802
2024	1.2711	1.8401	1.9799	5.3600e-003	0.2664	0.0473	0.3137	0.0765	0.0443	0.1208	0.0000	483.9749	483.9749	0.0547	0.0000	485.3421
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1600e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**832.8977**	**832.8977**	**0.1113**	**0.0000**	**835.6802**

	ROG	NOx	CO	SO2	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	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.6769	0.6769
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6766	1.6766
6	1-1-2023	3-31-2023	0.9621	0.9621
7	4-1-2023	6-30-2023	0.6759	0.6759
8	7-1-2023	9-30-2023	0.7218	0.7218

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6606	0.6606
11	4-1-2024	6-30-2024	1.1603	1.1603
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.6765	1.6765

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

1-51 Cont.

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4386	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4607	4.4607	4.3000e-003	0.0000	4.5680
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0000	2.4927	0.6625	0.0185	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1145	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6283	0.0156	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0267	3,791.432 4

	ROG	NOx	CO	SO2	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

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

1-51 Cont.

Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

1-51 Cont.

uilding Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
aving - Phases 2 and 3	Pavers	2	8.00	130	0.42
aving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
aving - Phases 2 and 3	Rollers	2	8.00	80	0.38
rchitectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

rips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
emolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction - hase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
emolition - Phases 2 nd 3	6	108.00	40.00	408.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
ite Preparation - hases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rading - Phases 2 nd 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
uilding Construction hases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
aving - Phases 2 and	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
rchitectural Coating - hases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

.1 Mitigation Measures Construction

1-51
Cont.

3.2 Demolition - Phase 1 - 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										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

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										MT/yr					
Hauling	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1680	15.1680	1.0400e-003	0.0000	15.1939
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.6000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.9300e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	0.0275	0.0275	2.2000e-004	0.0000	0.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**20.3126**	**20.3126**	**1.5800e-003**	**0.0000**	**20.3621**

1-51 Cont.

3.2 Demolition - Phase 1 - 2021

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										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

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										MT/yr					
Hauling	1.4300e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.8000e-004	3.6600e-003	9.6000e-004	1.8000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1830
Vendor	8.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.6000e-003	2.8900e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0339
Total	**5.5900e-003**	**0.0759**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 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					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

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	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.4700e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 2021

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					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0420	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0420**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

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	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	8.3000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6865	2.6865	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

1-51 Cont.

3.4 Grading - Phase 1 - 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					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

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	3.3000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-003	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2800e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 2021

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					0.0809	0.0000	0.0809	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

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	3.3000e-004	0.0111	2.7800e-003	3.0000e-006	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.6300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	6.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0109**	**1.0000e-004**	**0.0109**	**2.8500e-003**	**9.0000e-005**	**2.9600e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

1-51 Cont.

3.4 Grading - Phase 1 - 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					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8000e-004	9.6300e-003	2.3800e-002	3.0000e-005	6.6000e-004	2.0000e-005	6.6000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9688e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5600e-004**	**0.0000**	**10.2895**

1-51 Cont.

.4 Grading - Phase 1 - 2022

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					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.6800e-003	9.6800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.6800e-003**	**0.0846**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6500e-003	2.3900e-003	3.0000e-005	6.6800e-004	2.0000e-005	6.8800e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

1-51 Cont.

5 Building Construction - Phase 1 - 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	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0641	0.0000	227.2863
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9321**	**225.9321**	**0.0641**	**0.0000**	**227.2863**

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	7.8000e-003	0.2604	0.0663	7.3000e-004	0.0184	4.9000e-004	0.0189	5.1000e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3500e-003	0.0000	70.8928
Worker	0.0458	0.0326	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6800e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3089**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1482**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5875**	**178.5875**	**7.0600e-003**	**0.0000**	**178.7639**

1-51 Cont.

3.5 Building Construction - Phase 1 - 2022

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	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850

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	7.6000e-003	0.2684	0.0663	7.3000e-004	0.0184	4.9000e-004	0.0189	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.3600e-003	0.0000	70.8926
Worker	0.0458	0.0526	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	0.0536	0.3009	0.4428	1.9200e-003	0.1468	1.4300e-003	0.1482	0.0394	1.3300e-003	0.0407	0.0000	178.5875	178.5875	7.0600e-003	0.0000	178.7639

1-51 Cont.

3.6 Paving - Phase 1 - 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	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

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	5.9000e-004	0.0202	4.5800e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	3.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0236**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

6 Paving - Phase 1 - 2022

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	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4168
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4168**

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	5.9000e-004	0.0202	4.9300e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	5.8000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 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					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0408	9.9800e-003	1.1000e-004	2.7700e-003	7.6000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0585	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2165	16.2165	4.1000e-004	0.0000	16.2246
Total	**8.0600e-003**	**0.0457**	**0.0685**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 2022

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										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.6000e-003	1.6000e-003		1.6000e-003	1.6000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.6000e-003**	**1.6000e-003**		**1.6000e-003**	**1.6000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

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										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9600e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	5.5000e-004	0.0000	10.6642
Worker	8.0900e-003	4.9000e-003	0.0256	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	15.2166	15.2166	4.1000e-004	0.0000	15.2268
Total	**9.2600e-003**	**0.0453**	**0.0356**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**25.8645**	**25.8645**	**1.0600e-003**	**0.0000**	**25.8910**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8831**

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	9.4000e-004	0.0314	0.0100	1.5000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.4000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.4000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

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										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

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										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3649	14.3649	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.9000e-005	5.3800e-003	1.5300e-003	8.0000e-005	1.6080e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0130	1.6000e-004	0.0293	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	18.8277	18.8277	4.4000e-004	0.0000	18.8387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

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	4.4000e-004	0.0152	4.1600e-003	5.0000e-005	1.3500e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1535	5.1535	2.8000e-004	0.0000	5.1706
Worker	4.6600e-003	3.8200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7093	11.7093	2.8000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.6000e-004**	**0.0000**	**16.8863**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

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										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2087	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2087**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

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										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	4.4000e-004	0.0152	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.8000e-004	0.0000	5.1706
Worker	4.8600e-003	3.5200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0185**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.4000e-004**	**0.0000**	**16.8863**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 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										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3096	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1698
Total	**0.0359**	**0.3767**	**0.3096**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1698**

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										MT/yr					
Hauling	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0193	3.0000e-004	0.0195	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.6900e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	8.5700e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4800e-003	0.0597	3.3000e-004	0.0369	2.6000e-004	0.0371	9.7800e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 2023

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					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7272**	**54.7272**	**0.0177**	**0.0000**	**55.1697**

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	4.8000e-003	0.1642	0.0524	7.6000e-004	0.0103	3.0000e-004	0.0106	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.8900e-003	0.0000	75.4126
Vendor	8.4000e-004	0.0290	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.9575	9.9575	5.4000e-004	0.0000	9.9711
Worker	0.0124	0.4600e-003	0.0597	3.3000e-004	0.0769	2.6000e-004	0.0771	9.7500e-003	2.4000e-004	0.0100	0.0000	29.8044	29.8044	7.0000e-004	0.0000	29.8219
Total	**0.0181**	**0.2917**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3149	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	0.0931	0.3722	0.7689	3.3400e-003	0.2769	2.1300e-003	0.2810	0.0747	1.9700e-003	0.0767	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

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	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0600e-003	0.3148	0.0924	1.1000e-003	0.0257	3.6000e-004	0.0261	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.8900e-003	0.0000	107.1715
Worker	0.0840	0.0574	0.5764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.5300e-003	0.0681	0.0000	202.2438	202.2438	4.7500e-003	0.0000	202.3627
Total	0.0931	0.3722	0.6689	3.3400e-003	0.2759	2.1300e-003	0.2780	0.0727	1.9700e-003	0.0747	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.0809	0.7394	0.8692	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	**0.0809**	**0.7394**	**0.8692**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5170**	**127.5170**	**0.0302**	**0.0000**	**128.2709**

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	6.4300e-003	0.2273	0.0650	7.9000e-004	0.0208	2.6000e-004	0.0211	5.0000e-003	2.4000e-004	5.2900e-003	0.0000	77.1782	77.1782	4.1900e-003	0.0000	77.2831
Worker	0.0576	0.0379	0.4566	1.5600e-003	0.1810	1.2700e-003	0.1823	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	5.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

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	0.0809	0.7394	0.8892	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	**0.0809**	**0.7394**	**0.8892**	**1.4800e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5169**	**127.5169**	**0.0302**	**0.0000**	**128.2707**

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	6.4300e-003	0.3273	0.0690	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2691
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3500e-003**	**0.2018**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

1-51 Cont.

12 Paving - Phases 2 and 3 - 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	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

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	8.4000e-004	0.0096	8.4000e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0707
Worker	5.0100e-003	3.9400e-003	0.0479	1.6000e-004	0.0189	1.9000e-004	0.0190	5.0100e-003	1.8000e-004	5.1900e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7627
Total	**6.8500e-003**	**0.0136**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**0.0008**	**0.0000**	**24.8333**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 2024

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	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

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	6.4000e-004	0.0286	8.4800e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.8000e-004	3.0000e-005	8.1000e-004	0.0000	10.0566	10.0566	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6000e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.6500e-003**	**0.0326**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0165	4.0000e-004	0.0570	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

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	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	1.0783	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0692	0.0169	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5800e-003	6.0000e-005	1.6400e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0565	4.0000e-004	0.0570	0.0150	3.8000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2884
Total	0.0197	0.0811	0.1597	7.0000e-004	0.0620	4.7000e-004	0.0625	0.0166	4.4000e-004	0.0170	0.0000	64.3778	64.3778	2.0800e-003	0.0000	64.4288

1-51 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 6

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,384.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	990.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	308.60	171.62	554,321	554,321
Total	2,516.01	3,099.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

1-51 Cont.

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
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 Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0264	7.1000e-003	800.3011
NaturalGas Mitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5300e-005	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14900	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7937
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

1-51 Cont.

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	MMBtu/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6880	54.6880	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	14600	8.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.9000e-005	5.9000e-005		5.9000e-005	5.9000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7927
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 45 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0456e+006	266.4086	9.4800e-003	2.3700e-003	267.3534
Enclosed Parking with Elevator	1.9564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8685
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2591	7.5000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

6.0 Area Detail

6.1 Mitigation Measures Area

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive 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	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

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	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2432					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Health	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0827	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

1-51 Cont.

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	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0313	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4876**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5109	0.6283	0.0156	121.8697
Unmitigated	101.5109	0.6283	0.0156	121.8697

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1955 / 10.8028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.90248 / 0.859803	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331415	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5109**	**0.6283**	**0.0156**	**121.8697**

1-51 Cont.

.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.8028	82.8736	0.5815	0.0140	111.8715
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.55249 / 0.0958039	5.7304	0.0482	1.2000e-003	7.1304
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.64072 / 0.331415	2.9039	0.0177	4.4000e-004	3.4780
Total		101.5100	0.6293	0.0156	121.8697

.0 Waste Detail

.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2601	0.0000	94.3242
Unmitigated	38.0730	2.2601	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.96	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	56.91	11.9592	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5559	0.0920	0.0000	3.8573
Total		38.0730	2.2601	0.0000	94.3242

1-51 Cont.

8.2 Waste by Land Use

Mitigated

Land Use	Waste Disposed (tons)	Total CO2	CH4	N2O	CO2e
	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5569	0.0920	0.0000	3.8573
Total		38.0730	2.2501	0.0000	94.3242

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	269.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.80	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

1-51 Cont.

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

1-51 Cont.

tblVehicleTrips	SU_TR	5.65	5.04
tblVehicleTrips	SU_TR	131.84	205.63
tblVehicleTrips	SU_TR	26.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0592	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

1-51 Cont.

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	4.1271	41.5877	26.0668	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,782.521 0	6,782.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9683	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0512	0.0877	19.5356	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5184	1.0592	0.6026	1.6023	0.0000	7,295.973 5	7,295.973 5	0.8826	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5356**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	ROG	NOx	CO	SO2	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

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	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 3
Mobile	3.9049	17.6189	43.6920	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7959		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6720**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

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	8.5499	4.1819	23.4334	0.0265		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 3
Mobile	3.9049	17.6189	43.6920	0.1791	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7959		18,212.30 01
Total	**12.5742**	**22.8367**	**67.6720**	**0.2109**	**15.5725**	**0.6456**	**16.2181**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

1-51 Cont.

	ROG	NOx	CO	SO2	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 - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

1-51 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	347	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	150.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

1-51 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 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					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 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	0.1483	4.6911	1.0364	0.0146	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1200	3.8400e-003	0.1318	0.0369	3.6700e-003	0.0406		544.8769	544.8769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8900e-003	0.8042	6.5800e-003	0.8008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0238		886.5182
Total	**0.5336**	**7.0176**	**4.5018**	**0.0288**	**1.3600**	**0.0256**	**1.3856**	**0.3666**	**0.0242**	**0.3908**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.670 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					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

1-51 Cont.

3.2 Demolition - Phase 1 - 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	0.1405	4.7911	1.0364	0.0148	0.3776	0.0152	0.3928	0.0926	0.0146	0.1071		1,603.776 5	1,603.776 5	0.1070		1,606.451 4
Vendor	0.0557	1.9075	0.4527	5.1000e-003	0.1238	3.8400e-003	0.1316	0.0389	3.6700e-003	0.0405		544.9769	544.9769	0.0330		545.7009
Worker	0.3377	0.2190	3.0138	8.8000e-003	0.8943	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		886.9227	886.9227	0.0238		886.5192
Total	0.5338	7.0176	4.5018	0.0288	1.3600	0.0256	1.3856	0.3666	0.0242	0.2909		3,034.576 1	3,034.576 1	0.1638		3,038.670 6

3.3 Site Preparation - Phase 1 - 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	0.0360		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.467 3
Total	3.8882	40.4971	21.1543	0.0360	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.467 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0276	0.9530	0.2263	2.6500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4365	272.4365	0.0165		272.8505
Worker	0.2111	0.1369	1.8896	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	**0.2389**	**1.0906**	**2.1160**	**8.1100e-003**	**0.6229**	**6.0300e-003**	**0.6289**	**0.1647**	**5.6300e-003**	**0.1703**		**826.1401**	**826.1401**	**0.0314**		**826.9244**

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	3,685.656 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**	**0.0000**	**3,685.656 9**	**3,685.656 9**	**1.1920**		**3,715.457 3**

1-51 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0279	0.8598	0.2353	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1369	1.8836	5.5800e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1190	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1703		826.1401	826.1401	0.0314		826.9244

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0275	0.8598	0.2253	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0184	1.2400e-003	0.0200		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.9000e-003	0.9667	0.2556	7.9000e-003	0.2635		1,158.361 1	1,158.361 1	0.0403		1,159.368 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 6

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0275	0.8598	0.2359	2.5500e-003	0.0640	1.3200e-003	0.0653	0.0184	1.2400e-003	0.0200		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2130	3.0138	8.6900e-003	0.8942	6.5600e-003	0.9008	0.2372	6.0500e-003	0.2432		885.9227	885.9227	0.0238		886.5182
Total	0.3655	1.1728	3.2401	0.0114	0.9582	7.8800e-003	0.9667	0.2556	7.2900e-003	0.2635		1,158.361 1	1,158.361 1	0.0403		1,159.368 7

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0261	0.9053	0.2139	2.5200e-003	0.0640	1.5600e-003	0.0657	0.0164	1.5800e-003	0.0180		270.0691	270.0691	0.0159		270.4668
Worker	0.3168	0.1978	2.7888	8.5700e-003	0.9942	6.3900e-003	1.0006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3429**	**1.1032**	**3.0027**	**0.0111**	**1.0582**	**8.0500e-003**	**1.0663**	**0.2536**	**7.4600e-003**	**0.2611**		**1,124.248 3**	**1,124.248 3**	**0.0374**		**1,125.173 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0261	0.9053	0.2139	2.5300e-003	0.0640	1.6600e-003	0.0657	0.0184	1.5900e-003	0.0200		370.0591	370.0591	0.0159		370.4569
Worker	0.3168	0.1970	2.7860	8.5700e-003	0.0942	6.3900e-003	0.1006	0.2372	5.8900e-003	0.2430		654.1791	654.1791	0.0215		654.7174
Total	0.3429	1.1032	3.0007	0.0111	0.1582	8.0500e-003	0.1663	0.2556	7.4800e-003	0.2631		1,124.238 3	1,124.238 3	0.0374		1,125.173 2

3.5 Building Construction - Phase 1 - 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		2,554.333 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		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

1-51 Cont.

3.5 Building Construction - Phase 1 - 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	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.9800e-003	0.1976	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.076 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 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

1-51 Cont.

3.5 Building Construction - Phase 1 - 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	0.0783	2.7168	0.6417	7.5800e-003	0.1920	4.9900e-003	0.1970	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1282	0.0129	1.3413	9.5800e-003	1.3508	0.3557	8.8300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	0.5534	3.0128	4.8219	0.0204	1.5333	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 4

3.6 Paving - Phase 1 - 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	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	1.1026	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

1-51 Cont.

3.6 Paving - Phase 1 - 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	0.0261	0.9053	0.2139	2.5300e-003	0.0840	1.6800e-003	0.0857	0.0184	1.5900e-003	0.0200		270.0591	270.0591	0.0159		270.4558
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5311**	**4.8600e-003**	**0.5360**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**697.8145**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 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	0.0261	0.9053	0.2139	2.5300e-003	0.0548	1.6900e-003	0.0567	0.0184	1.6800e-003	0.0200		270.0591	270.0591	0.0159		270.4558
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0895	427.0895	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**4.8600e-003**	**0.5160**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1487**	**697.1487**	**0.0266**		**698.0145**

3.7 Architectural Coating - Phase 1 - 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					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**49.0421**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0527	1.8107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	6.3900e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.7200e-003**	**1.0319**	**0.2740**	**9.5700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

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	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0522	1.8108	0.4276	5.0600e-003	0.1280	3.5300e-003	0.1313	0.0365	3.1900e-003	0.0400		540.1183	540.1183	0.0312		540.9115
Worker	0.3168	0.1978	2.7760	6.6700e-003	0.8842	6.3900e-003	0.9006	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3690	2.0085	3.2146	0.0136	1.0122	9.7200e-003	1.0319	0.2740	9.0700e-003	0.2831		1,394.297 4	1,394.297 4	0.0533		1,395.628 9

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0380		0.9975	0.9975		0.9280	0.9280		3,746.904 0	3,746.904 0	1.0494		3,773.210 3
Total	2.2691	21.4844	19.6434	0.0380	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450		3,746.904 0	3,746.904 0	1.0494		3,773.210 3

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0441	1.4619	0.4663	7.0100e-003	0.1689	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0484		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2560	3.0800e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 9	1,047.470 9	0.0553		1,049.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4541**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1280**		**2,839.598 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6434	0.0388		0.9975	0.9975		0.9200	0.9200	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4044**	**19.6434**	**0.0388**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9200**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5600e-003	0.0489		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 3	1,047.470 3	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4741**	**0.0271**	**1.5127**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1266**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0389	1.3699	0.3954	4.9000e-003	0.1230	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4693	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0399	1.3689	0.3454	4.9000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4457	0.2686	3.8824	9.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	**0.4857**	**1.6374**	**4.2458**	**0.0173**	**1.4693**	**0.0109**	**1.4802**	**0.3926**	**0.0101**	**0.4026**		**1,757.251 6**	**1,757.251 6**	**0.0568**		**1,758.671 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.919 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.919 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2306	7.6512	2.4404	0.0367	0.0841	0.0142	0.0983	0.0230	0.0136	0.0366		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0350	1.3888	0.3854	4.9000e-003	0.1269	1.5400e-003	0.1285	0.0389	1.4700e-003	0.0403		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3680	5.1471	0.0165	1.7584	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0388		1,645.659 2
Total	0.8652	9.3781	7.9729	0.0581	1.9695	0.0282	1.9977	0.5361	0.0265	0.5627		6,151.470 9	6,151.470 9	0.3196		6,159.459 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					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.910 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2308	7.6512	2.4409	0.0367	0.8841	0.0140	0.8983	0.2423	0.0136	0.2559		3,963.047 2	3,963.047 2	0.2630		3,969.373 3
Vendor	0.0285	1.3689	0.3854	4.9000e-003	0.1260	1.6400e-003	0.1276	0.0359	1.4700e-003	0.0373		523.7364	523.7364	0.0277		524.4272
Worker	0.5957	0.3590	5.1471	0.0165	1.7984	0.0126	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 3
Total	0.8552	9.3791	7.9729	0.0581	2.8085	0.0282	2.8267	0.7534	0.0265	0.7799		6,151.470 9	6,151.470 9	0.3196		6,159.459 6

3.11 Building Construction - Phases 2 and 3 - 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

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 6
Worker	1.1169	0.6713	9.6909	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 6	0.0720		3,085.611 0
Total	1.2337	4.7779	10.8072	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 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					
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

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1169	4.1080	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2357	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1144	4.0964	1.1230	0.0146	0.3640	4.5700e-003	0.3686	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0817		1,567.552 8
Worker	1.0570	0.6118	9.0151	0.0299	3.3533	0.0230	3.3763	0.8890	0.0212	0.9105		2,982.626 8	2,982.626 8	0.0668		2,984.295 7
Total	1.1714	4.7082	10.1382	0.0445	3.7173	0.0276	3.7449	0.9999	0.0256	1.0254		4,548.136 5	4,548.136 5	0.1485		4,551.848 3

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	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1144	4.0864	1.1290	0.0145	0.3849	4.5700e-003	0.3895	0.1100	4.3700e-003	0.1143		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.6118	9.0151	0.0299	3.3539	0.0230	3.3763	0.8893	0.0212	0.9105		2,982.626 9	2,982.626 9	0.0668		2,984.295 7
Total	**1.1714**	**4.7082**	**10.1382**	**0.0445**	**3.7373**	**0.0276**	**3.7649**	**0.9999**	**0.0256**	**1.0254**		**4,548.136 5**	**4,548.136 5**	**0.1485**		**4,551.848 3**

3.12 Paving - Phases 2 and 3 - 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	0.0226		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0007			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0226**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0381	1.3665	0.3743	6.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4000e-003	0.0383		521.9366	521.9366	0.0272		522.6175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 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	0.9882	9.5246	14.6258	0.0270		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0270**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0381	1.3665	0.3743	6.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4000e-003	0.0383		521.9366	521.9366	0.0272		522.5175
Worker	0.2819	0.1531	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5196**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 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	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2189**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	**0.9218**	**3.2204**	**7.9608**	**0.0337**	**2.9386**	**0.0215**	**2.9601**	**0.7852**	**0.0199**	**0.8050**		**3,429.774 6**	**3,429.774 6**	**0.1079**		**3,432.471 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	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2188	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0762	2.7310	0.7487	9.7500e-003	0.2560	3.0600e-003	0.2591	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.036 0
Worker	0.8456	0.4894	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	**0.9218**	**3.2204**	**7.9608**	**0.0337**	**2.9386**	**0.0215**	**2.9601**	**0.7852**	**0.0199**	**0.8050**		**3,429.774 6**	**3,429.774 6**	**0.1079**		**3,432.471 6**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01
Unmitigated	3.9048	17.6188	43.6820	0.1781	15.5725	0.1246	15.6971	4.1659	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.24	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	263.17	906.60	171.62	554,321	554,321
Total	2,515.91	3,689.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001678	0.004899	0.000712	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

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 Mid Rise	9224.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7539
Total		0.1195	1.0380	0.5574	6.5100e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

CalEEMod Version: CalEEMod.2016.3.2 Page 43 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

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 Mid Rise	6.23403	0.0668	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.60776	0.0279	0.2763	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3240	330.3240	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

1-51 Cont.

	ROG	NOx	CO	SO2	Fugitive 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	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.8345					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

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	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.923 5	5,018.923 5	0.0962	0.0920	5,048.647 8
Landscaping	0.6686	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1997
Total	**5.4599**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.847 9**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

1-51 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	782.00	Space	0.00	316,800.00	0
Other Asphalt Surfaces	12.85	1000sqft	0.00	12,850.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,962.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	782
Regional Shopping Center	1.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	91
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	220.00	262.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

1-51 Cont.

tblVehicleTrips	SU_TR	5.88	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.19
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	36.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 9
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0858	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.640 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

1-51 Cont.

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	4.1481	41.5977	25.8913	0.0666	18.6891	2.0506	20.7397	10.0973	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,556.467 8
2023	3.1913	29.1780	26.1645	0.0859	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	8,828.756 0	8,828.756 0	1.2565	0.0000	8,860.167 9
2024	52.5051	18.1841	26.2624	0.0858	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.768 5	6,984.768 5	0.8930	0.0000	7,006.640 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**8,828.756 0**	**8,828.756 0**	**1.2565**	**0.0000**	**8,860.167 9**

	ROG	NOx	CO	SO2	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

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	6.5499	4.1819	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.6801	17.7886	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,593.83 45**	**23,593.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

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	6.5499	4.1819	23.4934	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,068.071 6	5,068.071 6	0.1341	0.0920	5,098.842 9
Energy	0.1195	1.0360	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.6801	17.7886	41.3513	0.1685	15.5725	0.1253	15.6978	4.1658	0.1163	4.2821		17,222.02 26	17,222.02 26	0.6930		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1658**	**0.6374**	**4.8031**	**0.0000**	**23,593.83 45**	**23,593.83 45**	**0.9521**	**0.1159**	**23,642.42 85**

1-51 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, 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
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 - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	3/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	2/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

1-51 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

1-51 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 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					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**		**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

1-51 Cont.

3.2 Demolition - Phase 1 - 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	0.1443	3.9493	1.1116	0.0145	0.3376	0.0154	0.3530	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.890 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1230	3.9600e-003	0.1320	0.0389	3.7900e-003	0.0426		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2388	2.7080	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		826.0894
Total	**0.5710**	**7.0905**	**4.3263**	**0.0278**	**1.3600**	**0.0259**	**1.3858**	**0.3686**	**0.0246**	**0.2912**		**2,931.745 6**	**2,931.745 6**	**0.1691**		**2,935.973 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					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

1-51 Cont.

3.2 Demolition - Phase 1 - 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	0.1443	4.9493	1.1116	0.0145	0.3378	0.0154	0.3532	0.0928	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9815	0.5085	4.9600e-003	0.1280	3.9800e-003	0.1320	0.0369	3.7000e-003	0.0406		529.1004	529.1004	0.0354		529.9864
Worker	0.3680	0.2338	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5718	7.0805	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931,745 6	2,931,745 6	0.1691		2,935,973 6

3.3 Site Preparation - Phase 1 - 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	3.0882	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	3.0882	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

1-51 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0293	0.9500	0.2583	2.4800e-003	0.0640	1.9600e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1006	1.9460	7.6800e-003	0.6229	6.0700e-003	0.6290	0.1647	5.6900e-003	0.1703		782.3841	782.3841	0.0316		783.1736

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	3.0892	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.0892	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

1-51 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1086	1.9460	7.6800e-003	0.6229	6.0900e-003	0.6290	0.1647	5.6900e-003	0.1723		782.3841	782.3841	0.0316		783.1736

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9268		2,895.149 6
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9268		2,895.149 5

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0293	0.9587	0.2533	2.4600e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2399	2.7183	8.3100e-003	0.8943	6.5800e-003	0.9009	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	**0.3982**	**1.1985**	**2.9716**	**0.0108**	**0.9582**	**8.5600e-003**	**0.9668**	**0.2536**	**7.9600e-003**	**0.2615**		**1,093.084 5**	**1,093.084 5**	**0.0399**		**1,094.082 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1589	1.1589		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1589**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0283	0.9697	0.2633	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.9000e-003	0.0183		264.6502	264.6502	0.0177		264.9927
Worker	0.3699	0.2398	2.7083	8.3100e-003	0.6942	6.5800e-003	0.7008	0.2372	6.0600e-003	0.2432		826.5343	826.5343	0.0222		827.0894
Total	**0.3982**	**1.1905**	**2.9616**	**0.0108**	**0.7582**	**8.5600e-003**	**0.7668**	**0.2536**	**7.9600e-003**	**0.2615**		**1,091.084 5**	**1,091.084 5**	**0.0399**		**1,091.882 1**

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.269 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.269 4**

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0275	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		796.8292	796.8292	0.0201		799.3305
Total	**0.3745**	**1.1202**	**2.7293**	**0.0105**	**0.9482**	**7.0200e-003**	**0.9553**	**0.2556**	**6.5300e-003**	**0.2621**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.268 4
Total	**1.9486**	**20.8551**	**15.2737**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9269**		**2,895.268 4**

1-51 Cont.

3.4 Grading - Phase 1 - 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	0.0275	0.9017	0.2356	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0164	1.6400e-003	0.0181		362.1942	362.1942	0.0170		362.6199
Worker	0.3470	0.2166	2.4998	8.0100e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		799.8292	799.8292	0.0201		799.3306
Total	**0.3745**	**1.1182**	**2.7393**	**0.0105**	**0.9582**	**8.1100e-003**	**0.9663**	**0.2536**	**7.5300e-003**	**0.2611**		**1,161.023 4**	**1,161.023 4**	**0.0371**		**1,161.950 4**

3.5 Building Construction - Phase 1 - 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		2,554.333 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**		**2,554.333 6**	**2,554.333 6**	**0.6120**		**2,569.632 2**

1-51 Cont.

3.5 Building Construction - Phase 1 - 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	0.0824	2.7052	0.7185	7.3600e-003	0.1926	5.1600e-003	0.1977	0.0553	4.9300e-003	0.0602		786.5827	786.5827	0.0511		787.8598
Worker	0.5206	0.3248	3.7497	0.0120	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,199.243 0	1,199.243 0	0.0301		1,199.998 0
Total	0.6029	3.0299	4.4682	0.0194	1.5339	0.0148	1.5486	0.4110	0.0138	0.4248		1,984.826 5	1,984.826 5	0.0812		1,986.858 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					
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

1-51 Cont.

3.5 Building Construction - Phase 1 - 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	0.0824	2.7952	0.7186	7.3600e-003	0.1420	5.1600e-003	0.1472	0.0363	4.9300e-003	0.0502		786.5827	786.5827	0.0511		787.8596
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	8.5900e-003	1.3500	0.3557	8.8300e-003	0.3646		1,198.243 8	1,198.243 8	0.0301		1,198.995 8
Total	**0.6029**	**3.0299**	**4.4682**	**0.0194**	**1.5333**	**0.0148**	**1.5481**	**0.4110**	**0.0138**	**0.4248**		**1,984.826 5**	**1,984.826 5**	**0.0812**		**1,986.855 6**

3.6 Paving - Phase 1 - 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	1.1020	11.1249	14.5805	0.0220		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1020**	**11.1249**	**14.5805**	**0.0220**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

1-51 Cont.

3.6 Paving - Phase 1 - 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	0.0275	0.9617	0.2385	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1083	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6653
Total	0.2010	1.0100	1.4884	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

1-51 Cont.

3.6 Paving - Phase 1 - 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	0.0275	0.9017	0.2395	2.4500e-003	0.0649	1.7200e-003	0.0667	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1735	0.1083	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6663
Total	**0.2010**	**1.0100**	**1.4894**	**6.4600e-003**	**0.5111**	**4.9200e-003**	**0.5169**	**0.1370**	**4.5800e-003**	**0.1416**		**661.6088**	**661.6088**	**0.0271**		**662.2862**

3.7 Architectural Coating - Phase 1 - 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					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0193		281.9062
Total	**48.8421**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0193**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2186	2.4998	6.0100e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9788**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 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					
Archit. Coating	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

1-51 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0550	1.8834	0.4790	6.9100e-003	0.1288	3.4480e-003	0.1314	0.0368	3.2980e-003	0.0401		524.3885	524.3885	0.0341		525.2399
Worker	0.3470	0.2186	2.4936	6.0100e-003	0.8842	6.3800e-003	0.8906	0.2372	5.8800e-003	0.2430		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9728**	**0.0129**	**1.0222**	**9.8300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 4**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4644	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4644**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0454	1.4687	0.4906	6.6800e-003	0.1599	2.7800e-003	0.1717	0.0453	2.6300e-003	0.0480		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2446	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4337**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4154**	**0.0129**	**0.4283**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4644	19.6434	0.0386		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4644**	**19.6434**	**0.0386**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9280**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

1-51 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0454	1.4687	0.4906	6.6800e-003	0.1599	2.7800e-003	0.1717	0.0453	2.6300e-003	0.0480		746.9002	746.9002	0.0500		748.1504
Vendor	0.0820	2.7392	0.8471	9.5100e-003	0.2568	3.2300e-003	0.2597	0.0737	3.0800e-003	0.0768		1,017.446 6	1,017.446 6	0.0589		1,018.920 9
Worker	0.4081	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5355**	**4.4527**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4154**	**0.0129**	**0.4283**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	16.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**16.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0410	1.3991	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.4909	0.2935	3.4559	0.0116	1.3415	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**	**0.0000**	**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

1-51 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0410	1.3691	0.4235	5.7600e-003	0.1288	1.5100e-003	0.1296	0.0368	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.4909	0.2938	3.4553	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 6**

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**		**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2374	7.6877	2.5678	0.0360	0.8841	0.0146	0.8986	0.2423	0.0139	0.2562		3,909.269 2	3,909.269 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0363	1.5400e-003	0.0384		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.6079	0.0154	1.7584	0.0125	1.7709	0.4743	0.0115	0.4859		1,538.074 3	1,538.074 3	0.0361		1,538.977 6
Total	0.9329	9.4395	7.5992	0.0562	2.8685	0.0286	2.8971	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 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					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2

1-51 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2374	7.6871	2.5878	0.0360	0.8841	0.0146	0.8986	0.3423	0.0139	0.3562		3,909.368 2	3,909.368 2	0.2617		3,915.911 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.1260	1.6100e-003	0.1276	0.0359	1.5400e-003	0.0374		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.8079	0.0154	1.7684	0.0125	1.7809	0.4743	0.0115	0.4858		1,538.074 3	1,538.074 3	0.0881		1,539.977 6
Total	**0.9329**	**9.4389**	**7.5992**	**0.0562**	**2.8805**	**0.0286**	**2.8291**	**0.7534**	**0.0269**	**0.7804**		**5,956.065 8**	**5,956.065 8**	**0.3274**		**5,964.249 7**

3.11 Building Construction - Phases 2 and 3 - 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	1.5726	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	**1.5726**	**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**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1231	4.0803	1.3706	0.0143	0.3840	4.8400e-003	0.3889	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0886		1,528.381 3
Worker	1.2272	0.7344	8.6398	0.0089	3.3533	0.0734	3.3767	0.8990	0.0215	0.9205		2,883.889 3	2,883.889 3	0.0678		2,885.583 0
Total	**1.3502**	**4.8146**	**9.9105**	**0.0232**	**3.7373**	**0.0282**	**3.7655**	**0.9999**	**0.0261**	**1.0260**		**4,410.059 2**	**4,410.059 2**	**0.1562**		**4,413.964 3**

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**

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1231	4.0800	1.2705	0.0143	0.3840	4.6400e-003	0.3888	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0895		1,528.351 3
Worker	1.2272	0.7344	8.6299	0.0289	3.3530	0.0234	3.3767	0.8893	0.0215	0.9108		2,883.889 3	2,883.889 3	0.0671		2,885.563 0
Total	1.3502	4.8146	9.9005	0.0432	3.7373	0.0282	3.7655	0.9999	0.0261	1.0260		4,410.059 2	4,410.059 2	0.1566		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1204	4.0714	1.3342	0.0142	0.3640	4.7700e-003	0.3688	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0970		1,523.164 1
Worker	1.1649	0.6690	9.0553	0.0260	3.3533	0.0230	3.3763	0.8693	0.0212	0.8905		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0402	3.7173	0.0278	3.7451	0.9799	0.0258	1.0056		4,309.846 8	4,309.846 8	0.1590		4,313.582 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	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4439	16.1660	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

1-51 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1204	4.0714	1.2342	0.0142	0.3849	4.7700e-003	0.3896	0.1106	4.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0870		1,523.154 1
Worker	1.1849	0.6690	8.0583	0.0280	3.9533	0.0230	3.9763	0.6883	0.0212	0.9095		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	**1.2853**	**4.7403**	**9.2895**	**0.0422**	**3.7373**	**0.0278**	**3.7651**	**0.9999**	**0.0258**	**1.0256**		**4,309.846 8**	**4,309.846 8**	**0.1490**		**4,313.572 4**

3.12 Paving - Phases 2 and 3 - 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	9.5746	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5746**	**14.6258**	**0.0220**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5500e-003	0.1296	0.0368	1.5200e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 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					
Off-Road	0.9882	9.5246	14.6258	0.0220		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0220**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

1-51 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0401	1.3571	0.4114	6.7400e-003	0.1288	1.5500e-003	0.1296	0.0368	1.5300e-003	0.0384		506.9931	506.9931	0.0298		507.7180
Worker	0.3106	0.1784	2.1461	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		743.5980	743.5980	0.0157		744.1115
Total	**0.3508**	**1.5355**	**2.5575**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.591 1**	**1,250.591 1**	**0.0455**		**1,251.829 6**

3.13 Architectural Coating - Phases 2 and 3 - 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	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2188**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 38 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 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					
Archit. Coating	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1800	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	50.1540	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

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 39 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0803	2.7142	0.8228	9.4800e-003	0.2589	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	1.0122	3.2494	7.2671	0.0319	2.9386	0.0216	2.9603	0.7852	0.0200	0.8052		3,245.080 2	3,245.080 2	0.1076		3,247.770 7

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1659	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7885	41.3513	0.1685	15.5725	0.1253	15.6978	4.1659	0.1153	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.94	1,094.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit-Down Restaurant)	869.51	1,476.02	1018.86	1,352,980	1,352,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	263.17	518.60	171.62	554,321	554,321
Total	2,515.61	3,089.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit-Down	16.60	8.40	6.90	6.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

1-51 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000712	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000712	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035698	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

1-51 Cont.

CalEEMod Version: CalEEMod.2016.3.2 Page 42 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, 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 Mid Rise	6234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2807.76	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3240	330.3240	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

CalEEMod Version: CalEEMod.2016.3.2 Page 43 of 46 Date: 4/12/2021 9:36 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

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 Mid Rise	6.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.80776	0.0003	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3240	330.3240	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

1-51 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	6.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6368					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Health	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**6.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

1-51 Cont.

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4501	3.8314	1.6729	0.0261		0.3179	0.3179		0.3179	0.3179	0.0000	5,010.023 5	5,010.023 5	0.0962	0.0930	5,048.847 9
Landscaping	0.6585	0.2506	21.7605	1.1600e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0079		40.1960
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1041	0.0930	5,088.043 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

1-51 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

1-51 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

1-51 Cont.

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

```
 Anemometer Height:   10.000 meters

 Dominant Surface Profile: Urban

 Dominant Climate Type:    Average Moisture

 Surface friction velocity (u*): not adjusted

DEBUG OPTION ON




 AERSCREEN output file:

 2021.04.05_PacificCoastCommons_Operation.out



 *** AERSCREEN Run is Ready to Begin




 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

1-51 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

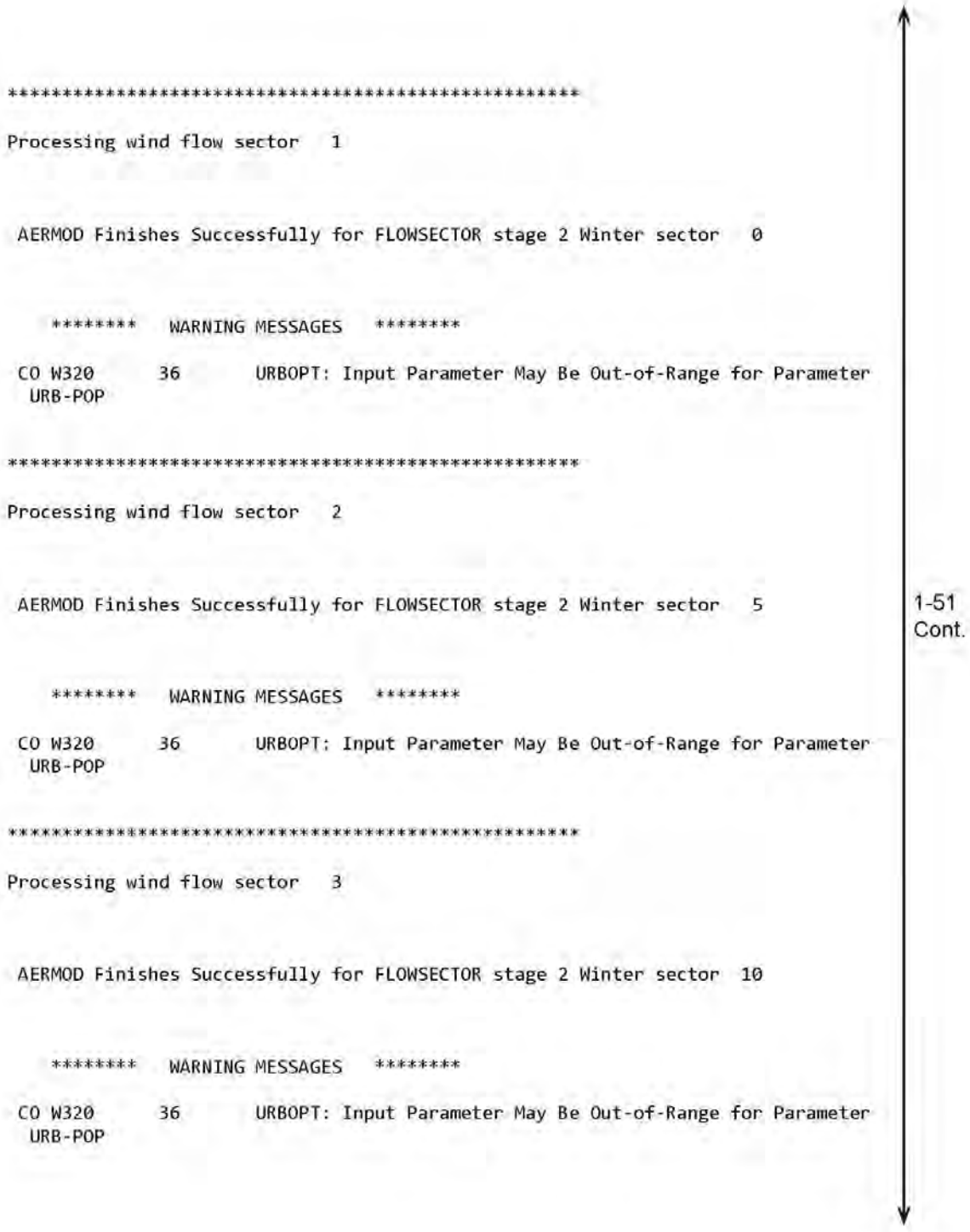
Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

1-51 Cont.

```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 **************************************************
```

1-51
Cont.

```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

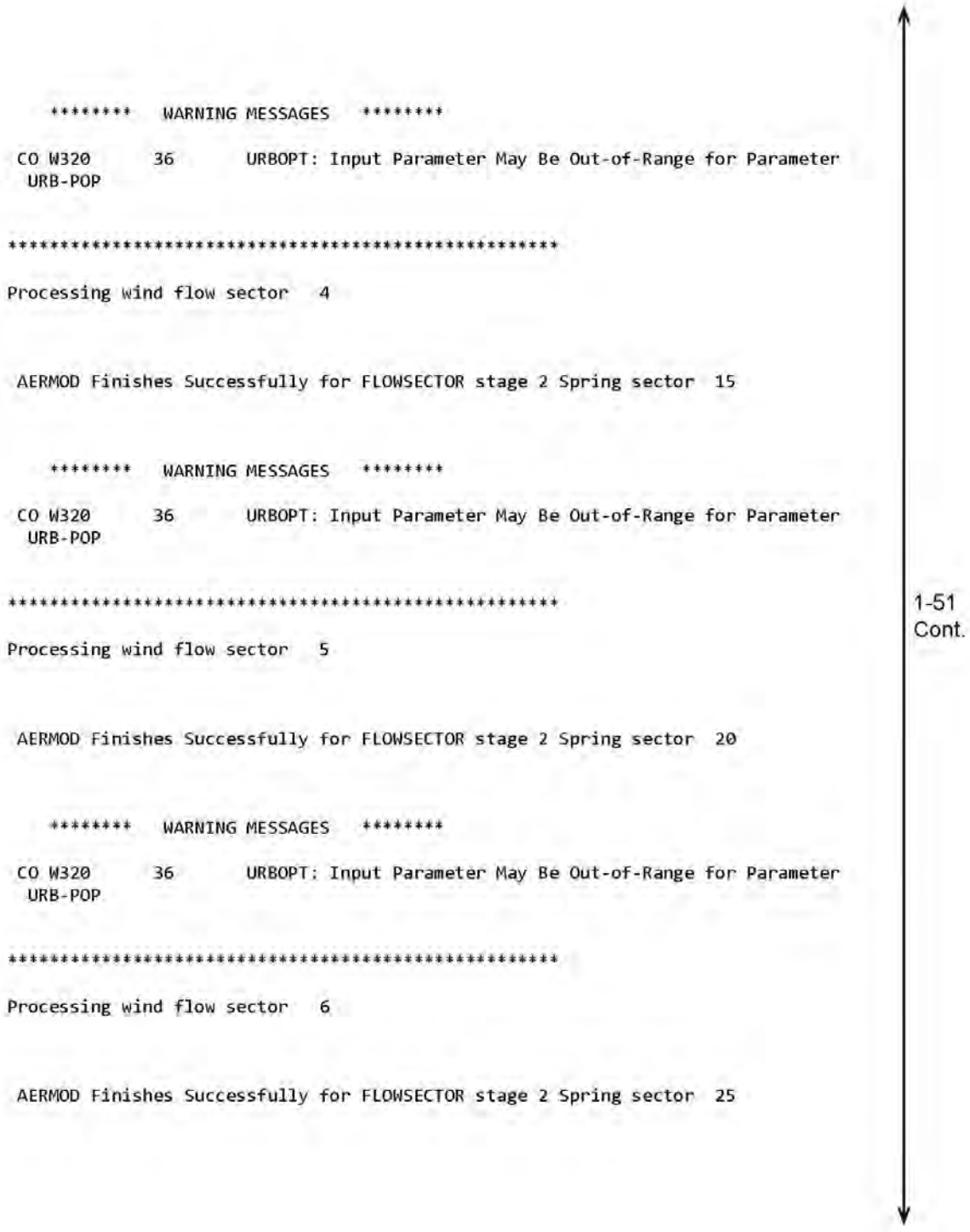
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

1-51
Cont.

```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

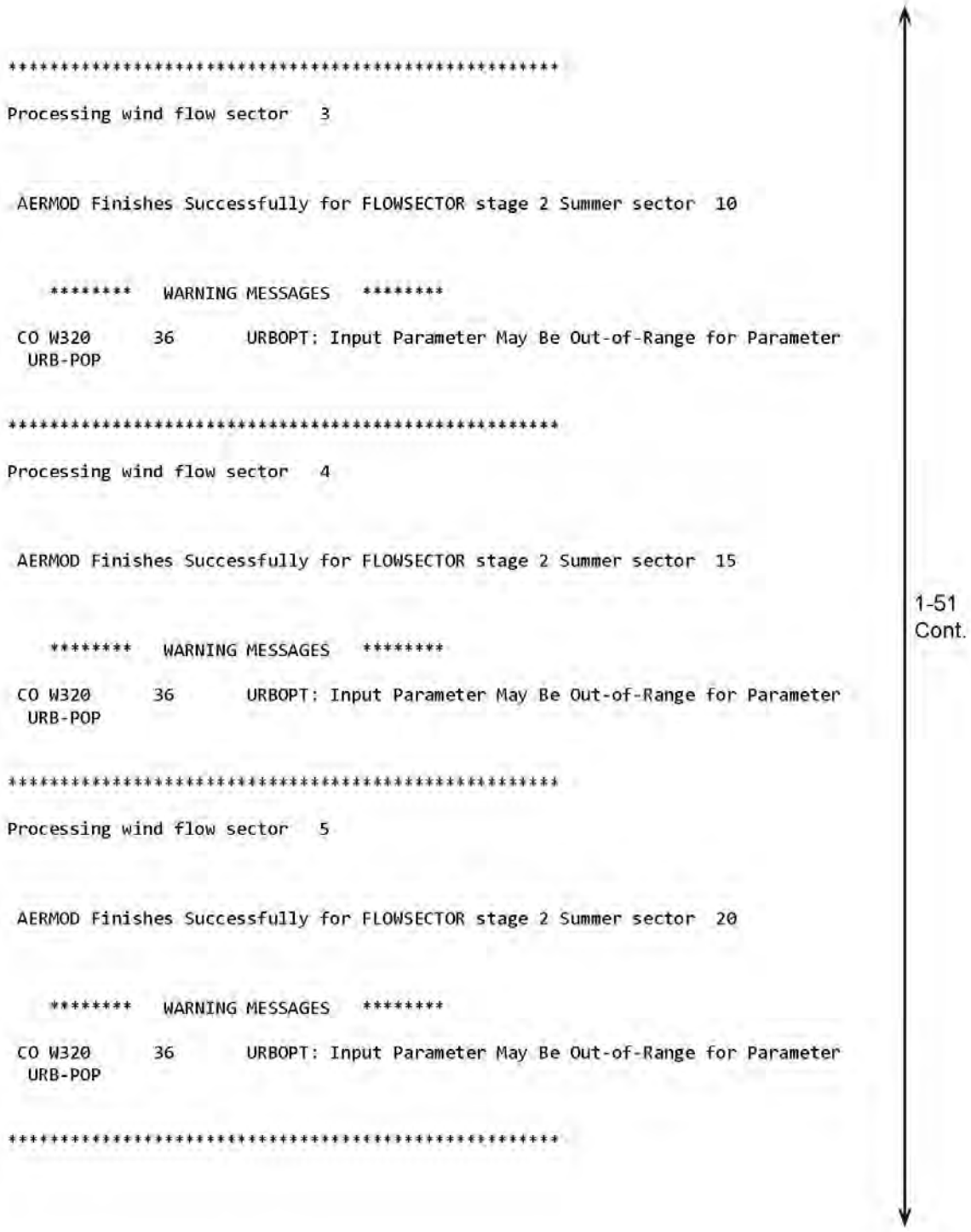
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

1-51 Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

1-51
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

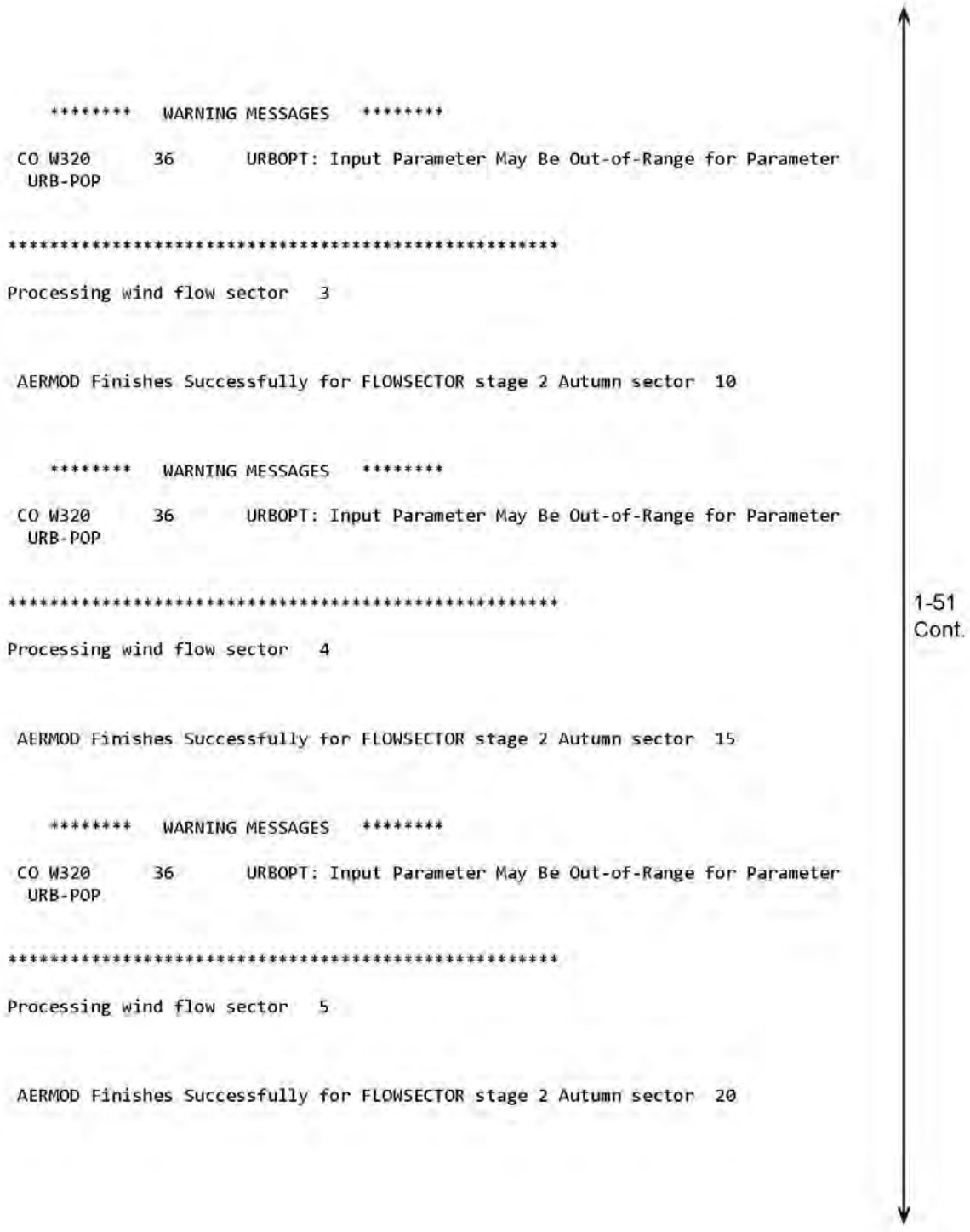
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

1-51 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

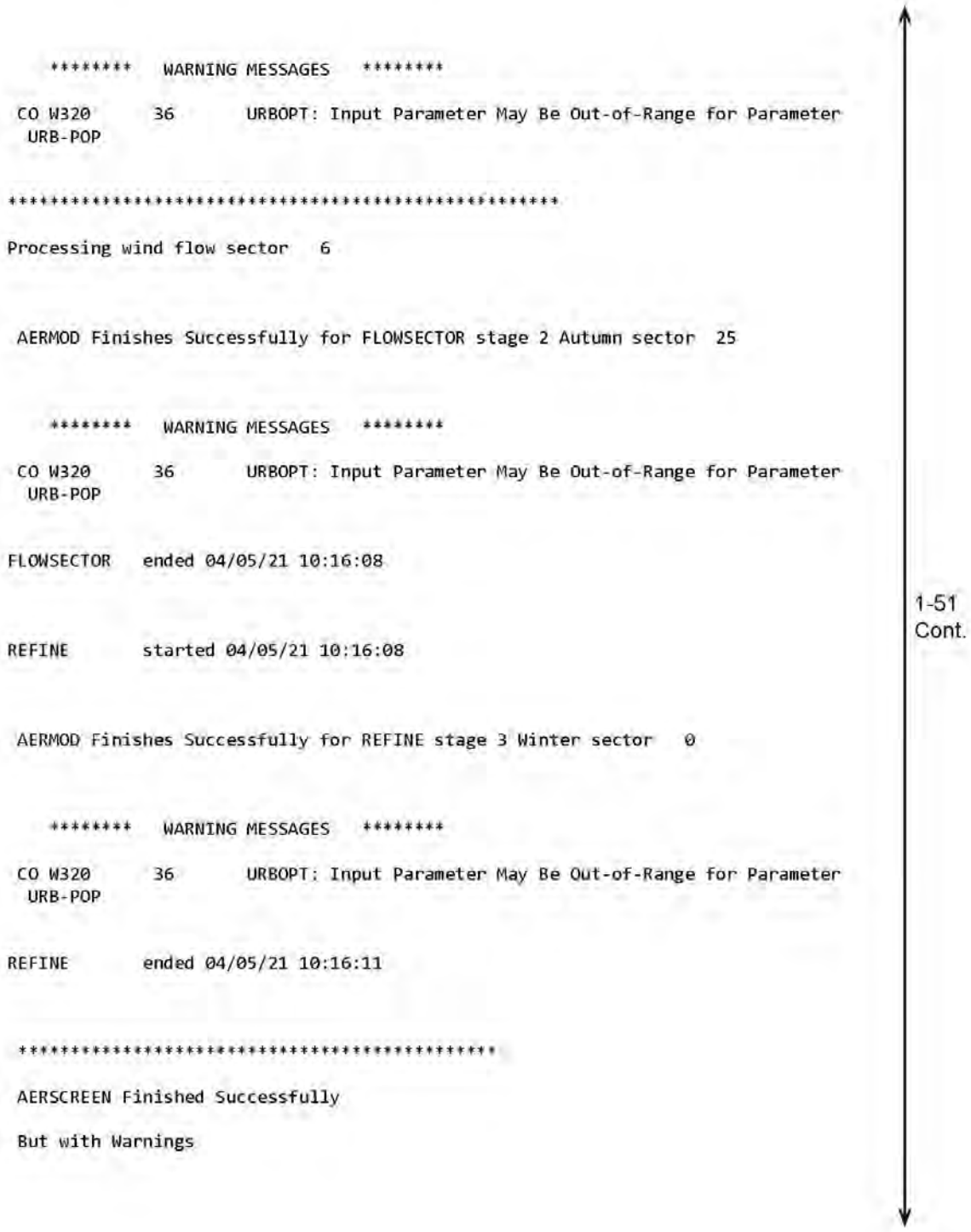
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

1-51
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

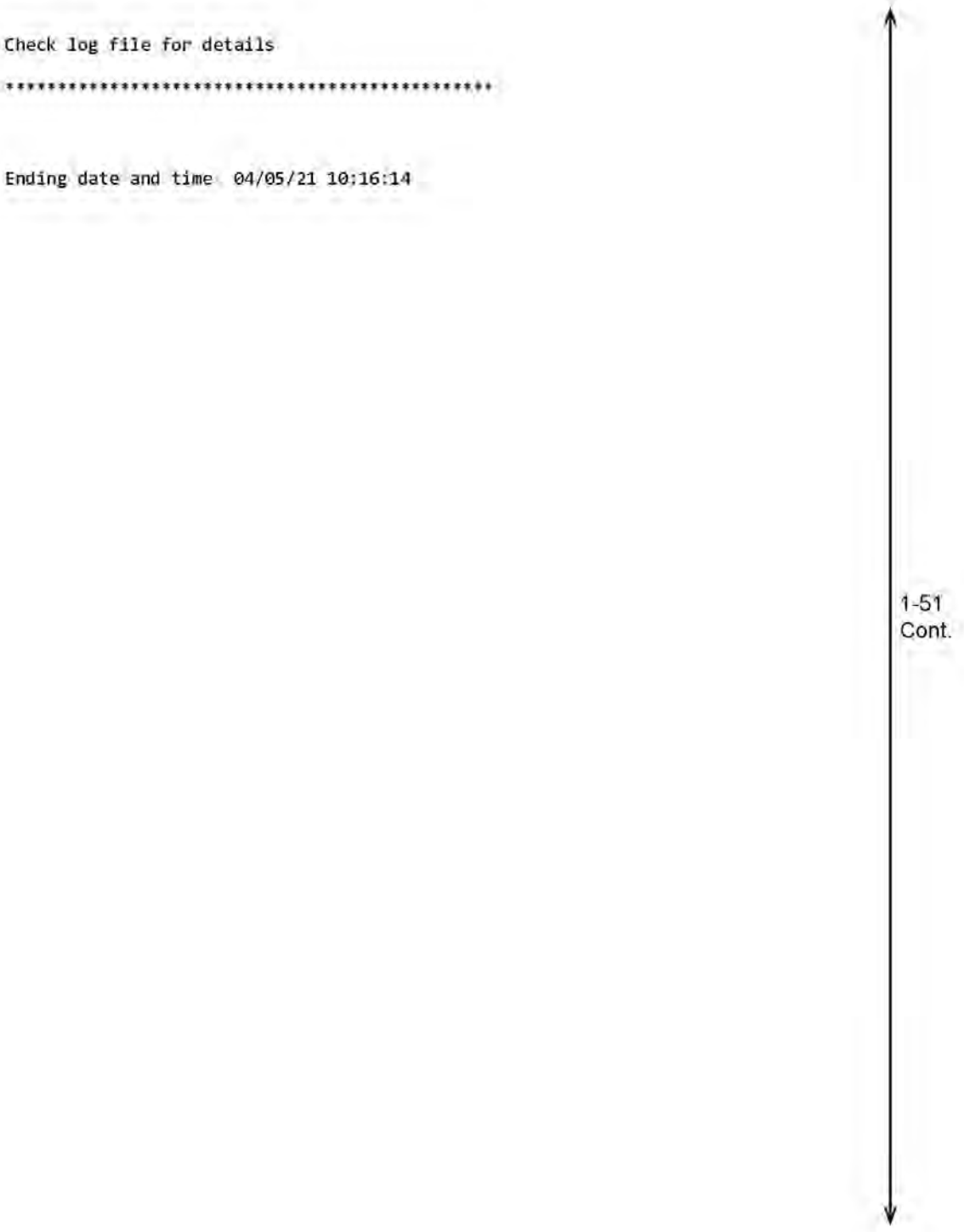
REFINE       ended 04/05/21 10:16:11


 ********************************************

 AERSCREEN Finished Successfully

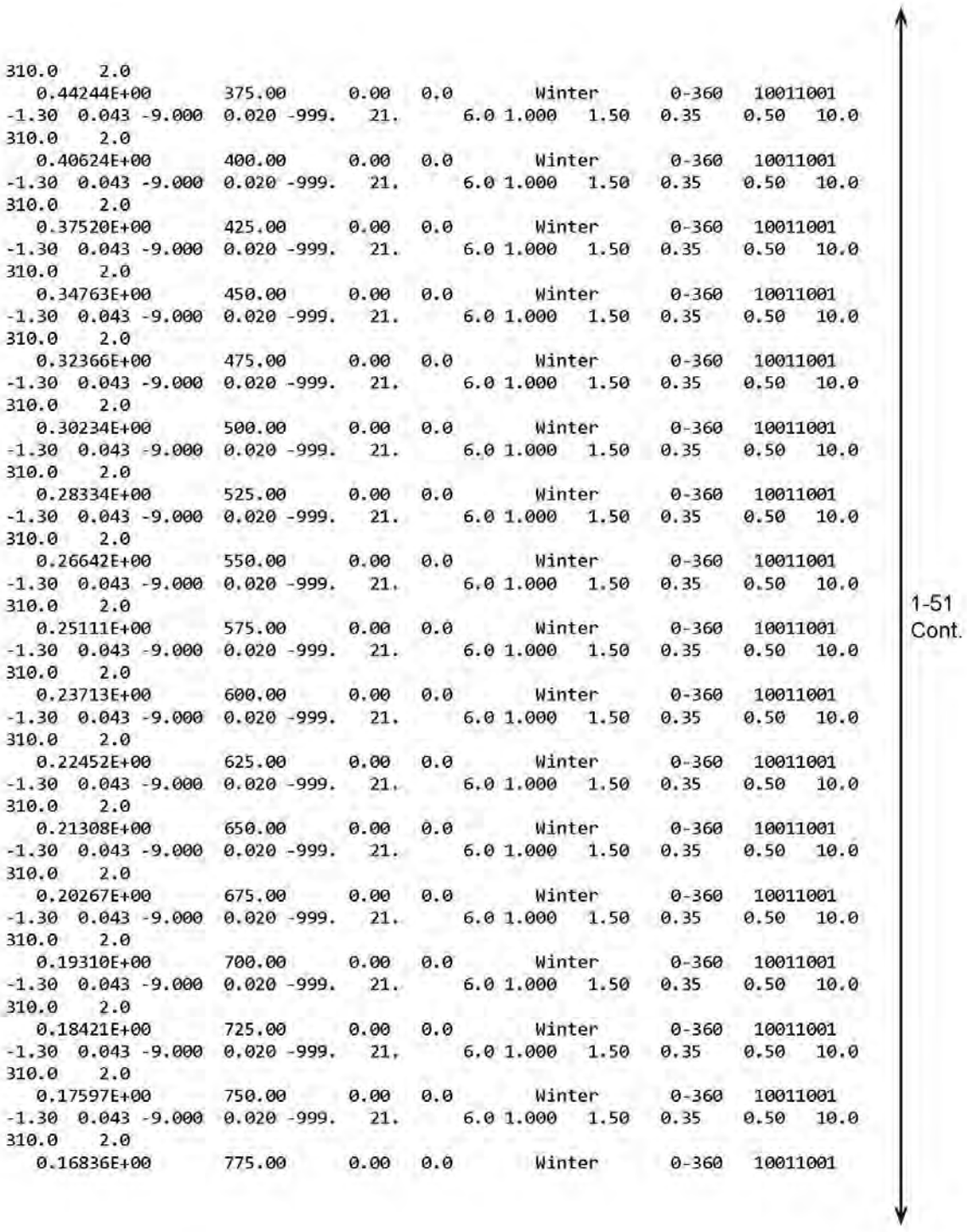
 But with Warnings
```

1-51 Cont.


Check log file for details
****
Ending date and time 04/05/21 10:16:14
1-51
Cont.

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



```
310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
```

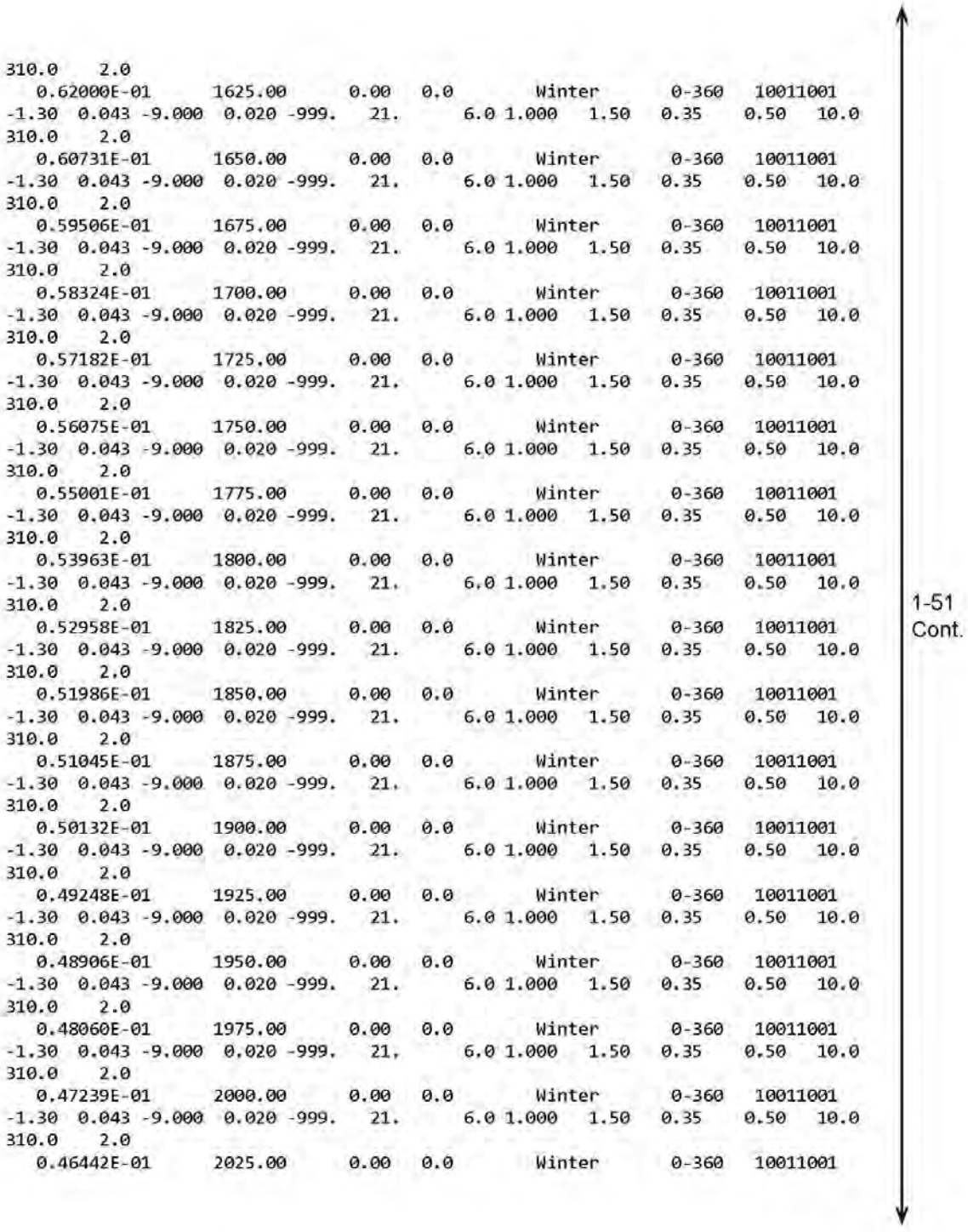
1-51 Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

```
   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



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310.0    2.0
   0.62000E-01      1625.00      0.00   0.0        Winter       0-360   10011001
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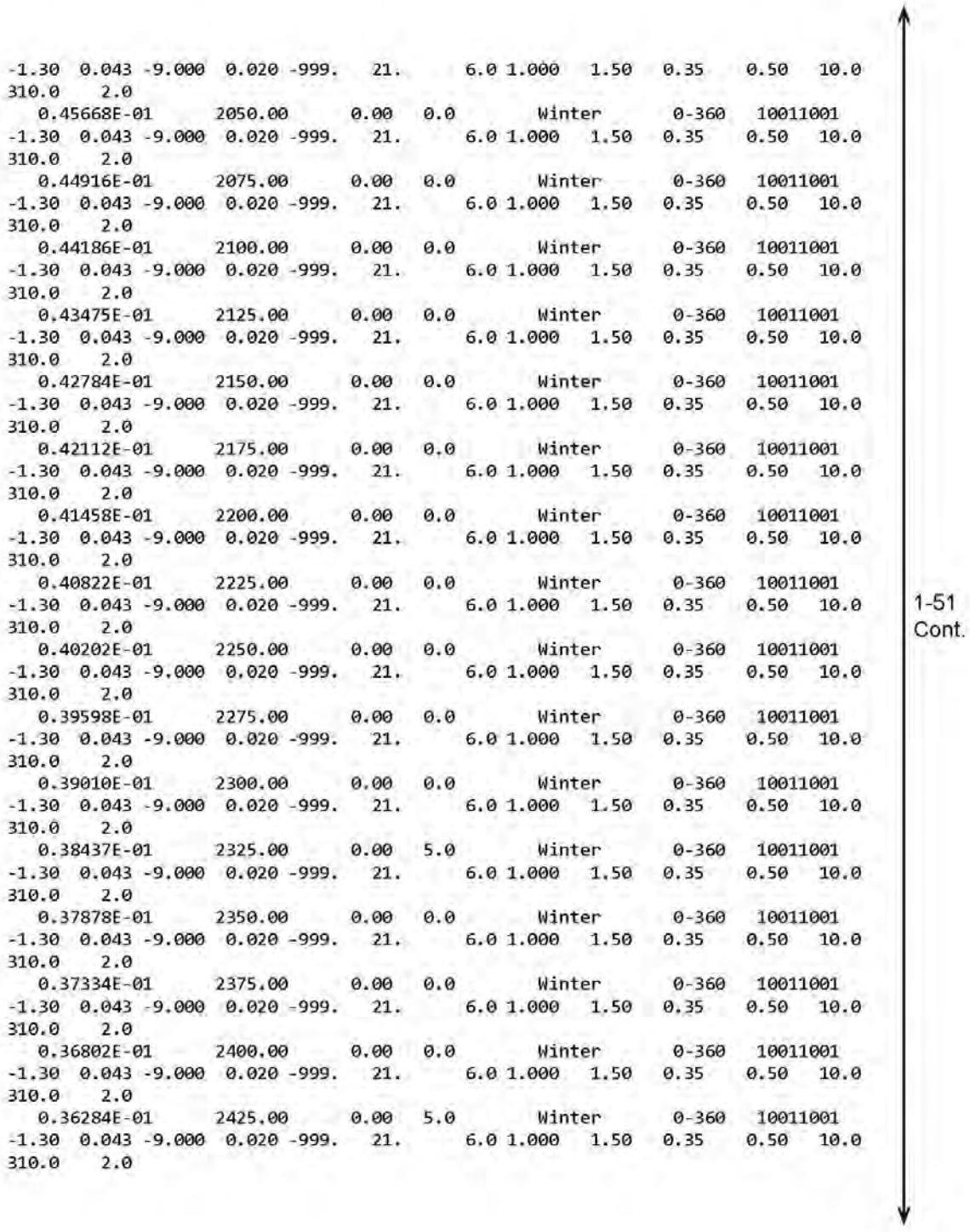
310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.46442E-01      2025.00      0.00   0.0        Winter       0-360   10011001
```

1-51
Cont.



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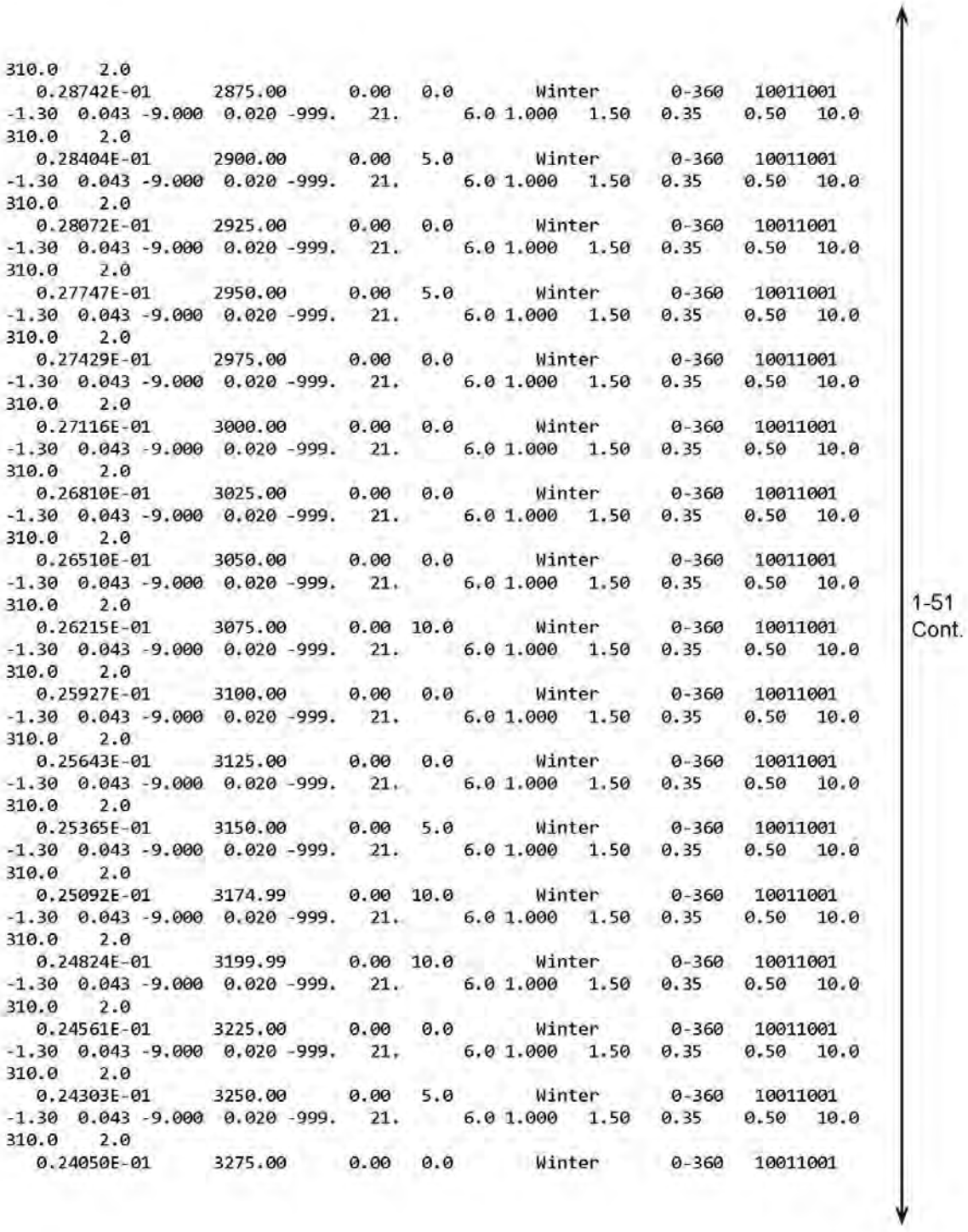
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.45668E-01      2050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

```
   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



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310.0    2.0
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310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter      0-360   10011001
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310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter      0-360   10011001
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310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter      0-360   10011001
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1-51 Cont.

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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

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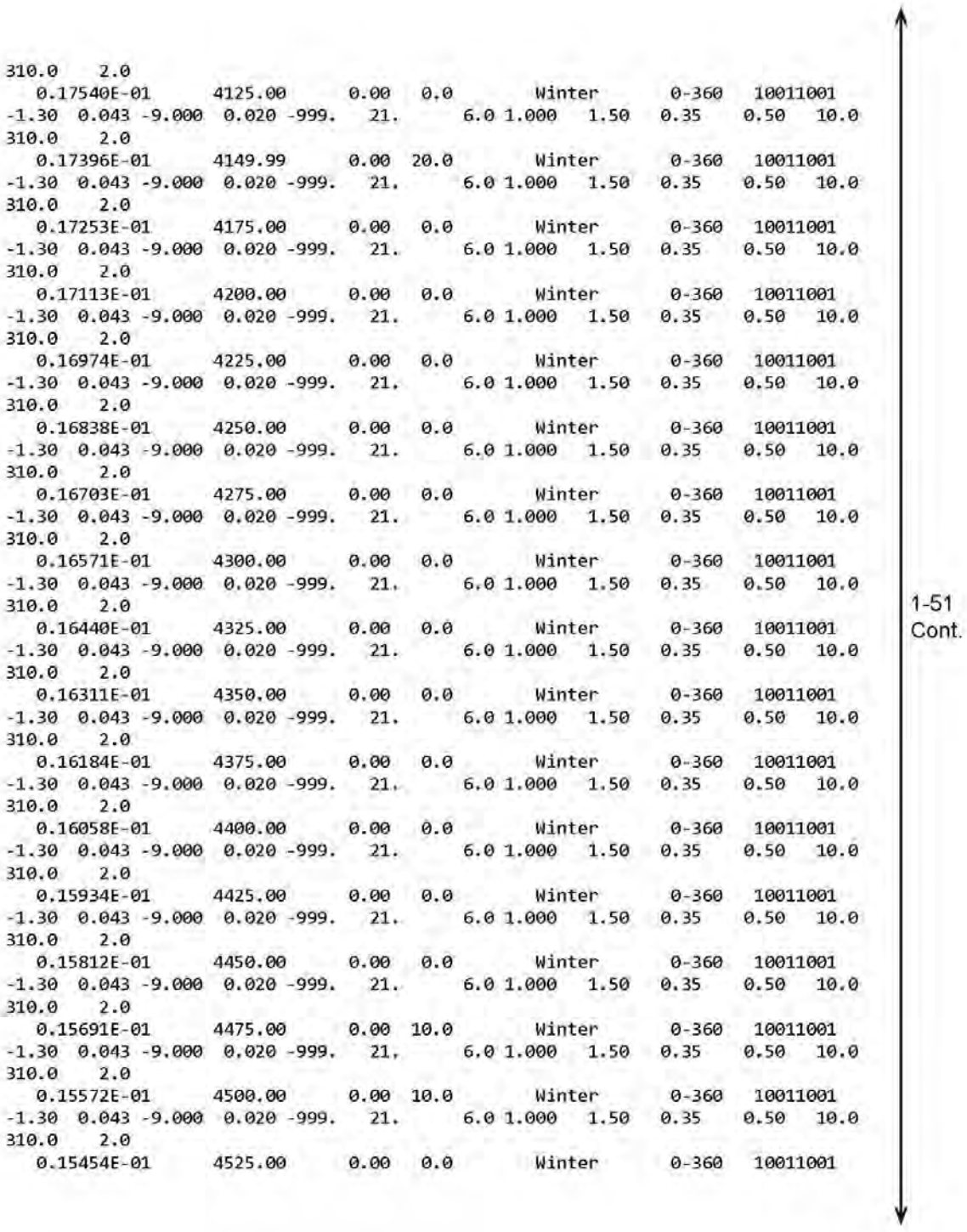
   0.20352E-01      3700.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

1-51 Cont.



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310.0    2.0
   0.17540E-01      4125.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter      0-360   10011001
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1-51 Cont.

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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

1-51 Cont.

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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
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I-51 Cont.

Attachment E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
Santa Monica, California 90405
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Office: (310) 452-5555
Fax: (310) 452-5550
Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

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.

1-52

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 H_2O 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:

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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.

1-52 Cont.

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.

1-52
Cont.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluoroactane 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.

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 Florala, 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.

1-52 Cont.

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.

1-52 Cont.

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.

1-52 Cont.

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

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

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 Agrosciences, 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

1-52 Cont.

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm 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

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

1-52 Cont.

Attachment F

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
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 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. 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) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

1-52 Cont.

- 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 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, 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 more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- 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.

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.

1-52 Cont.

- 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.
- 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

1-52 Cont.

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

4

1-52 Cont.

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

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 is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

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, Coloradao.

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).

5

1-52 Cont.

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

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.

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1-52
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1-52 Cont.

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1-52 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

EXHIBIT B

MITCHELL M. TSAI
ATTORNEY AT LAW

Mitchell Tsai <mitch@mitchtsailaw.com>

COMMENT LETTER: Pacific Coast Commons Specific Plan Project [SCH No.: 2020050508]

Leon Ramsey, Jr. <leon@mitchtsailaw.com> Mon, Apr 12, 2021 at 6:27 PM
To: psamaras@elsegundo.org
Cc: Mitchell Tsai <mitch@mitchtsailaw.com>, Greg Sonstein <greg@mitchtsailaw.com>

Good evening,

Please see attached regarding the above-referenced project and confirm receipt of this email and its attachment.

Thank you,

Leon Ramsey Jr.
Paralegal

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1-53 Cont.

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Response to Comment Letter 1

Southwest Regional Council of Carpenters
(via Mitchell M. Tsai, Attorney at Law)
December 8, 2021

1-1 In summary, this comment includes an introductory statement and a general summary of the proposed Project's description.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-2 This comment requests the City to provide notice to the commenter of all notices referring or related to the proposed Project.

The commenter's request will be granted in accordance with the California Public Records Act (Government Code §§6250-6270); California Environmental Quality Act (CEQA) (Public Resource Code §21000 et seq); and Planning and Zoning Law (Government Code §§65000-65010), as cited in the letter. Additionally, in accordance with CEQA Guidelines Section 15094, the Lead Agency (the City of El Segundo) shall file a Notice of Determination (NOD) within five working days after deciding to carry out or approve the Project. The NOD will also be filed with the Los Angeles County Clerk and the Governor's Office of Planning and Research State Clearinghouse. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-3 In summary, this comment states the City should require the Project applicant to provide additional community benefits such as local hire project labor agreement to construct the proposed Project. Furthermore, the comment cites Comment 1-26 for more discussion.

Please refer to Response to Comment 1-26.

This comment requests that the City consider utilizing "skilled and trained workforce policies and requirements". This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing economic benefits and benefits to greenhouse gas, air quality, and transportation impacts. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

Additionally, the comment requests that the City require the Project to be built to standards exceeding the 2019 California Green Building Code (CalGreen) to mitigate environmental impacts. Draft EIR Sections 4.4, Energy and 4.6, Greenhouse Gas Emissions, determined impacts would be less than significant and no mitigation was required. The proposed Project would be built in accordance with the current Building Energy Efficiency Standards (Title 24) at the time of construction, which include robust requirements for energy efficiency (Draft EIR page 4.4-14). Moreover, Table 4.6-8, Project Consistency with Scoping Plan Greenhouse Gas Emission Reduction Strategies, demonstrates that the proposed

Project would be consistent with the City's Municipal Code and CalGreen requirements (Draft EIR page 4.6-43). Given this, the proposed Project currently meets required standards and no change or addition is required to the Draft EIR's environmental analysis. However, this comment is acknowledged and will be taken into consideration by the City's decision markers.

1-4 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations.

The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq.* The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-5 In summary, this comment states that significant revisions to Chapter 3, Changes to the Draft EIR, of the Final EIR were made, thus, requiring recirculation of the EIR due to changes to transportation and cumulative impacts analyses with the addition of three additional related projects.

Chapter 2, Responses to Comments, of the Final EIR addressed concerns associated with cumulative impact analyses. As discussed in Topical Response No. 1 – Cumulative Impacts (starting on Final EIR page 2-2), the City added three reasonably foreseeable projects shown and incorporated in Table 2-2, Additional Related Projects. Topical Response No. 1 determined the additions do not change the impact conclusions in the Draft EIR, nor do they result in any new significant impacts or the need for new or altered mitigation measures, as further demonstrated in Topical Response No. 1. Given that these changes would not result in a new significant impact or in an increase in the severity of a previously identified significant impact, pursuant to CEQA Guidelines Section 15088.5, recirculation of the Draft EIR is not required.

Regarding the commenter's assertion about the Final EIR's transportation analysis, Topical Response No. 1 concluded the addition of three related projects would not change the Draft EIR's determination. Appendix A, Revised Future Analysis, of the Final EIR was included to support this conclusion. For example, the addition of three related projects would not change the proposed Project's proximity to public transit and the Project (and other related projects) would cumulatively contribute to transit ridership maintained by Metro and LADOT, which would result in less than significant impacts. Additionally, the Final EIR demonstrated the addition of three related projects would not result in a cumulatively significant impact related to vehicle miles traveled (VMT). As further described in Chapter 2 of the Final EIR, the Project's VMT would fall below SCAG's efficiency-based threshold and the Project site is located within an urbanized area served by public transit. Therefore, the Project's contribution to cumulative VMT would not be cumulatively considerable.

Finally, the comment notes changes to the Draft EIR have been made to the Project's trip generation, traffic volume, and level of service (LOS) analyses. As detailed in Chapter 2, Responses to Comments, of the Final EIR, discussion of the changes in the LOS analysis were made for informational purposes related to the applicability of the City's General Plan policies. However, automobile delay and traffic congestion are not considered to be impacts on the environment for the purposes of traffic and transportation analysis (California Public Resources Code Section 21099(b)(2)). As such, the City's LOS

policy is not applicable under CEQA per Senate Bill (SB) 743. No change or addition to the EIR's environmental analyses are required.

1-6 In summary, this comment states the Southwest Regional Council of Carpenters submitted comments to the Draft EIR on April 12, 2021. However, an administrative error occurred. As such, the comment letter was not included in Final EIR Chapter 2, Responses to Comments.

The City acknowledges the receipt of the pre-dated comment letter, which is included as Comments 1-8 through 1-25. Please see Responses to Comments 1-8 through 1-25 for responses to the letter.

1-7 In summary, this comment states opposition to the proposed Project and requests revisions and recirculation of the Draft EIR.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

Responses 1-8 through 1-25 are for "Exhibit A, April 12, 2021 SWRCC Letter to Paul Samaras"

1-8 Please refer to Response to Comment 1-1.

1-9 Please refer to Response to Comment 1-2.

1-10 Please refer to Response to Comment 1-3.

1-11 In summary, this comment states a summary of the qualifications of Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D and refers to their comments regarding the Draft EIR's greenhouse gas emissions analyses, which are attached to the primary comment letter.

The comment does not express any environmental comments or concerns related to the analysis in the Draft EIR. The aforementioned comments are included as Comments 1-26 and 1-28 through 1-51. As such, please see Responses to Comments 1-26 and 1-28 through 1-51, for more discussion.

1-12 Please refer to Response to Comment 1-4.

1-13 Please refer to Response to Comment 1-5.

1-14 In summary, this comment recommends that the City adopt mitigation measures to mitigate public health risks related to COVID-19 during construction of the proposed Project.

The potential for Project construction to cause COVID-19 to spread through worker exposure is not an impact on the environment under CEQA, rather it is a public health concern under the purview of federal, state, and local public health agencies. CEQA requires the consideration of significant changes in the environment caused by a proposed project; therefore, an existing adverse environmental condition that a project does not create or exacerbate is not responsible for mitigating that adverse condition. Implementation of the proposed Project would not create or exacerbate an existing environmental hazard or an existing public health hazard, and therefore, no mitigation is required. Compliance with existing mandates from federal, state, and local public health agencies, including California Occupational Safety and Health Administration's (Cal/OSHA) *COVID-19 Prevention Emergency Temporary Standards* (ETS) are specifically intended to

address workplace health and safety (OSHSB 2021). Policy mandates from public health agencies are consistently updated to address rapidly changing circumstances and provide the most appropriate and methods for protecting worker safety. For instance, the most recent Order from the County of Los Angeles Department of Public Health requires that by January 17, 2022, mandates that employers must provide their employees who work indoors and in close contact with other workers or the public, and require them to wear, a well-fitting medical grade mask, surgical mask, or higher-level respirator, such as an N95 filtering facepiece respirator or KN95, at all times while indoors at the worksite or facility (LACDPH 2022). In addition to mandatory measures set forth by the County of Los Angeles Department of Public Health related to masking in the workplace and Cal/OSHA's *COVID-19 Prevention Emergency Temporary* Standards (ETS), there are other federal OSHA standards that apply to protecting workers from infection include: requirements for personal protective equipment (PPE) (29 CFR part 1910, Subpart I (e.g., 1910.132 and 133)), respiratory protection (29 CFR 1910.134), sanitation (29 CFR 1910.141), and OSHA's requirements for employee access to medical and exposure records (29 CFR 1910.1020). Employers are also required by the General Duty Clause, Section 5(a)(1) of the OSH Act, to provide a safe and healthful workplace free from recognized hazards that are causing or likely to cause death or serious physical harm (OSHA 2021).

Therefore, compliance with mandatory federal, state, and local public health agency regulations would ensure adequate and appropriate protections for workplace safety and the proposed Project would not create or exacerbate an existing environmental or public health hazard. There is no aspect of the proposed Project that would prevent or interfere with the United Brotherhood of Carpenters providing the Carpenter union members with additional trainings related to COVID-19. No changes to the project description or environmental analyses included in the Draft EIR are required.

1-15 In summary, this comment states the Draft EIR defers details within specific mitigation measures, as detailed below.

In summary, this comment states MM-CUL-1 does not include details of the Worker Environmental Awareness Program (WEAP) to reduce potential impacts to archeological resources. As described in Draft EIR Section 4.3, Cultural Resources, mitigation measure MM-CUL-1 includes numerous requirements that must be included in the training program, which include: (1) inform workers about sensitivity of the Project area, (2) provide specific details on the kinds of archaeological materials that may be identified during construction, (3) explain the importance of and legal basis for the protection of significant archaeological resources, (4) provide actions to be taken in the event of a discovery of cultural resources (see MM CUL-2), (5) define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource, and (6) each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities, which must include work curtailment or redirection, and the immediate contact of the site supervisor and archaeological monitor. Contrary to the commenter's assertion, these required components of the WEAP are detailed and include measurable performance standards for accomplishing the objectives of the WEAP. Additionally, the development of the WEAP must be conducted by a qualified archaeologist that meets the Secretary of the Interior's Professional Qualification Standards for Archaeology, and must ultimately be prepared to the satisfaction of the City. Thus, no change to the Draft EIR is required nor does MM-CUL-1 defer critical details necessary to reduce impacts.

In summary, this comment states MM-GEO-1 does not include details of the Paleontological Resources Impact Mitigation Program (PRIMP) to reduce potential impacts to paleontological resources. As described

in Draft EIR Section 4.5, Geology and Soils, mitigation measure MM-GEO-1 includes numerous requirements that must be included in the program, which include: (1) must be consistent with the Society of Vertebrate Paleontology (SVP) (2010) guidelines, (2) must provide requirements for preconstruction meeting attendance and worker environmental awareness training, (3) must provide procedures for adequate paleontological monitoring and discoveries treatment, (4) must provide paleontological methods [including sediment sampling for microvertebrate fossils], reporting, and collections management, (5) must require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities [including augering] in previously undisturbed, Pleistocene Sand Dune deposits, and (6) in the event that paleontological resources (e.g., fossils) are unearthed during grading, must require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources. Contrary to the commenter's assertion, these required components of the PRIMP are detailed and include measurable performance standards for accomplishing the objectives of the PRIMP. Additionally, the development of the PRIMP must be conducted by a qualified paleontologist that meets SVP guidelines and must ultimately be prepared to the satisfaction of the City. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-1 does not include any specific performance standards for removal or a plan for review. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-1 includes language to ensure abatement procedures for the removal of specified materials are in compliance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project activities. Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-1. As such, mitigation measure MM-HAZ-1 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

In summary, this comment states MM-HAZ-2's proposed Hazardous Materials Contingency Plan (HMCP) does not include a plan or performance standards to mitigate soil vapor to less than significant levels. As described in Draft EIR Section 4.7, Hazards and Hazardous Materials, mitigation measure MM-HAZ-2 includes numerous requirements that must be included in the plan, which include: (1) must include training procedures for identification of contamination, (2) must describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations, (3) must manage and dispose of any contaminated soils in accordance with local and state regulations, and (4) must include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. MM-HAZ-2 includes language to ensure the development of the proposed HMCP is in accordance with all applicable state and local regulations. Moreover, the MM-HAZ-2 states contaminated soils shall be managed and disposed of in accordance with local and state regulations. Section 4.7.2, Relevant Plans, Policies, and Ordinances, of the Draft EIR identifies federal, state, regional, and local regulations included for analysis of the proposed Project and compliance during Project

activities. For example, in the event of asbestos removal, Project activities would be required to comply with the National Emission Standards for Hazardous Air Pollutants (Title 40 of the United States Code (USC), Chapter 1, Subchapter C, Part 61, Subpart M) and the Toxic Substances Control Act of 1976 (Title 15 USC, Chapter 53, Subchapter I, Section 2601 et seq.). Regarding the implementation of the proposed HMCP, Project activities would be required to comply with the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (California Health and Safety Code, Division 20, Chapter 6.11, Sections 25404–25404.9). Additionally, Table 4.1, Mitigation Monitoring and Reporting Program, of the Final EIR identifies the City of El Segundo Development Services Department as the agency responsible for monitoring implementation of MM-HAZ-2. As such, mitigation measure MM-HAZ-2 includes the necessary performance standards and regulatory compliance in order to adequately reduce impacts. Therefore, no change to the Draft EIR is required.

1-16 In summary, this comment states that the Draft EIR does not support its findings with substantial evidence.

This comment does not express any environmental comments or concerns related to the analyses in the Draft EIR. Instead, as shown in Comments 1-17 through 1-20, concerns related to greenhouse gas emissions, air quality, transportation, and hazards and hazardous materials are identified as specific examples of the commenter's concern. Please see Responses to Comments 1-17 through 1-20 for more discussion.

1-17 In summary, the comment begins with an overview of caselaw related to greenhouse gas (GHG) emissions and asserts the Draft EIR did not support its findings on GHG impacts, utilized an incorrect quantitative analysis of GHG emissions, incorrectly relied upon an outdated quantitative GHG threshold, did not identify a potentially significant GHG impact; did not consider performance-based standards under California Air Resources Board's (CARB's) 2017 Scoping Plan or performance-based standards under Southern California Association of Governments' (SCAG's) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) plan, and did not consider all feasible mitigation to reduce GHG emissions.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-29 through 1-49 below. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-29 through 1-49 below.

1-18 In summary, the comment asserts the Draft EIR's Air Quality analysis is not supported by substantial evidence.

No details or substantiation for these comments is provided; rather, the comment summarizes in a bulleted list the reasons that are discussed in detail the SWAPE letter dated April 12, 2021. Responses to the more detailed issues raised in that letter are included in Responses to Comments 1-30 through 1-42 below correspond to each of the bulleted items listed in the comment. None of the issues raised constitute new information that would result in significant impacts that would result in the need for recirculation of the Draft EIR. Please refer to Responses to Comments 1-30 through 1-42 below.

1-19 In summary, this comment states that the VMT analysis does not accurately reflect total VMT as home-based VMT analysis does not includes trips made from the other uses on the Project site, such as retail and hotel.

In the absence of VMT guidance from the City of El Segundo, State CEQA guidance from the Governor's Office of Planning and Research (OPR) was used. This document provides suggestions to lead agencies regarding methodologies to analyze VMT associated with a project. For residential projects, OPR recommends that a proposed project exceeding a level of 15% below existing daily household VMT per capita may indicate a significant transportation impact. Household VMT per capita for PCC was determined by using the Southern California Association of Government's (SCAG) 2016 Regional Transportation Plan (RTP) travel demand model. The SCAG travel demand model identifies trip purposes as Home-Based Work (HBW) and Home-Based Other (HBO), where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. Therefore, all trips produced or attracted to the residential use have been included in the VMT analysis for the project and provides an accurate estimate of the project related VMT per capita or resident.

While this is a mixed-use project with retail uses, the State's guidance does not require VMT analysis for local-serving retail land uses on the grounds that they do not increase VMT and defines local serving as less than 50,000 square feet. Since the proposed commercial components of the Project total 11,252 square feet, (i.e., less than 50,000 square feet) the VMT analysis properly focused on the proposed residential components of the Project. The hotel uses are already an existing use on the Project site and therefore, were not included in the analysis.

This comment also includes a footnote referring to the City of Santa Clarita VMT Guidelines. The Santa Clarita guidelines are intended to provide guidance for office, retail, and residential projects and thus discusses all of the different trip types. The Santa Clarita guidelines follows the OPR guidance in screening local serving retail projects with less than 50,000 square feet from VMT analysis as local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. The guidelines also provides thresholds for each project type as outlined in the OPR guidance. Although Santa Clarita's local CEQA guidelines are in no way applicable to the City of El Segundo, it can be noted for purposes of this response that the analysis done in this EIR is consistent with the Santa Clarita guidelines. No change to the Draft EIR is required.

1-20 In summary, this comment states that additional investigation is required to characterize contamination on the Project site associated with nearby contaminated sites, including the adjacent gas station and regional tetrachloroethylene (PCE) and trichloroethylene (TCE) contamination.

With regards to the PCE and TCE contamination: As noted in the second paragraph of Draft EIR page 4.7-5, groundwater flow is west-southwest, making the PCE contamination plume downgradient from the Project site. The known and suspected contamination sources listed as part of the investigation are also downgradient of the Project site. Investigations on nearby properties, conducted between 2016 and 2018, further evidence the regional PCE and TCE contamination observed southwest of the subject property has not impacted the area of the Project site (see Appendix F of the Draft EIR).

Furthermore, a soil vapor investigation was conducted at 650 and 700 N Pacific Coast Highway, less than 200 feet northeast of the Project site, did not identify PCE or TCE contamination in soil vapor above current (2019) Environmental Screening Levels (ESLs) (City of El Segundo 2021). As such, there are no identified sources of PCE or TCE on, adjacent to, or upgradient of the Project site, there is no evidence of contamination upgradient of the Project site, and there is no evidence that the contamination plume has impacted the Project site. The Phase I ESA determined that there were no conditions that would require further analysis. Therefore, there is no evidence of impacts to future occupants.

With regards to the gas station, it is noted that contamination may be present due to operational violations, but contamination has not been identified during multiple former investigations. Out of an abundance of precaution, MM-HAZ-2 was proposed to mitigate the most likely potential contamination which may be identified during construction. Should any contamination be identified, it would be removed, the release would be reported in accordance with environmental regulatory rules and regulations (California Code of Regulations Title 19, Section 2631), and confirmation sampling would be conducted to confirm removal. These actions would further remove potential impacts to future occupants during operation of the proposed Project. No changes or additions to the project description or analyses included in the Draft EIR are required.

1-21 In summary, this comment states the Draft EIR's Project Objectives are narrow and affect the consideration of reasonable alternatives, specifically related to Project Objectives 1 and 5.

Each project objective was prepared in accordance with Section 15124(b) of the State CEQA Guidelines. Project Objective 1 is outlined in Draft EIR Section 3.5, Project Objectives, and states the following, "Provide for comprehensive site planning that maintains the existing hotel uses while providing for a mixed-use multiple-family and commercial neighborhood that is compatible with the surrounding land uses" (Draft EIR page 3-18). Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Alternative development scenarios are not unduly constrained by the retention of the existing hotels, as additional residential and commercial uses could occur in multiple configurations. Further, the commenter's potentially preferred scenario of not maintaining the existing hotels would not be beneficial from an environmental perspective (i.e., would increase demolition and construction-related impacts to the environment).

With regard to Objective 5, the comment notes the objective calls for "increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses." Contrary to the commenter's assertion, this objective is an accurate articulation of the Project Applicant's objective, which is also consistent with CEQA Guidelines Section 15126.6, and would allow for consideration of a range of alternatives with reduced impacts on the environment. Eliminating underutilized surface parking lots to allow for a densification of land use intensity and a diversity of land uses that share parking facilities to minimize parking and encourage alternative modes of transportation is specifically supportive of many City General Plan policies and objectives as outlined in Table 4.9-1 in Section 4.9, Land Use and Planning, and SCAG RTP/SCS goals as outlined in Table 4.6-6 in Section 4.6, Greenhouse Gas Emissions of the Draft EIR.

Importantly, both of these Objectives allow for numerous potential alternative development scenarios that involve both additional residential and commercial uses in multiple configurations. The retention of the existing hotels and redevelopment of underutilized surface parking are objectives of the Project Applicant and would not limit consideration of a reasonable range of alternatives. Further, CEQA Guidelines Section 15126.6(c) states: "the range alternatives to the proposed project shall include those that could feasibly accomplish ***most of the basic objectives*** of the project and could avoid or substantially lessen one or more of the significant effects." (emphasis added). Therefore, contrary to the commenter's assertion, these two Project Objectives would not "curtail any meaningful analysis or consideration of Project alternatives that substantially reduce the Project's environmental impacts." No changes to the Draft EIR are required.

1-22 In summary, this comment cites provisions of the California Government Code and case law for background on State planning and zoning law.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-23 In summary, this comment states the Draft EIR does not demonstrate consistency with the Southern California Association of Governments (SCAG) Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), in accordance with SB 375, and cites Comments 1-28 through 1-51 for examples.

Draft EIR Section 4.9, Land Use and Planning discusses regional regulations such as the SCAG RTP/SCS within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR page 4.9-4). Moreover, under Section 4.9.4, Impact Analysis, and Table 4.6-6, Project Consistency with the Connect SoCal (SCAG 2020-2045 RTP/SCS) within Section 4.6, Greenhouse Gas Emissions, of the Draft EIR analyzes the proposed Project's consistency with each goal identified within the SCAG RTP/SCS (Draft EIR pages 4.9-11 through 4.9-12 and 4.6-33 through 4.6-37). However, this particular comment does not identify the aforementioned specific examples related to the analysis in the Draft EIR. Additionally, please see Responses to Comments 1-26 and 1-28 through 1-51, below, for more discussion.

1-24 In summary, this comment states the Draft EIR does not demonstrate consistency with State Housing Element law and cites provisions of the California Government Code and case law for background.

Draft EIR Section 4.9, Land Use and Planning discusses the City's General Plan and zoning regulations within Section 4.9.2, Relevant Plans, Policies, and Ordinances (Draft EIR pages 4.9-5 through 4.9-8). Moreover, under Section 4.9.4, Impact Analysis, Table 4.9-1, General Plan Consistency Analysis, outlines the applicable policies of the General Plan and analyzes the proposed Project's consistency with each applicable provision (Draft EIR pages 4.9-12 through 4.9-33). Applicable goals and policies of the City's Housing Element are identified and subsequent Project consistency analyses are detailed under Table 4.9-1 on Draft EIR pages 4.9-20 and 4.9-21. The comment does not identify specific examples of inconsistency within the Draft EIR's consistency analysis.

Additionally, the comment asserts the Draft EIR does not analyze consistency with the latest Regional Housing Needs Allocation (RHNA) and states the Project as proposed does not include affordable housing units. Moreover, the comment states the Draft EIR's provision for a future development agreement should be included within the Draft EIR's Project Description.

Section 4.11, Population and Housing, of the Draft EIR details Housing Element law and the City's 5th and 6th Cycle RHNA allocation. Chapter 3, Changes to the Draft EIR, of the Final EIR revised the City's fair share allocation for the 2021-2029 RHNA planning period. As such, the comment correctly states the City's 6th Cycle RHNA allocation. However, the comment incorrectly asserts Draft EIR page 4.11-6 as the latest RHNA allocation. At the time of drafting the Draft EIR (February 2021), the City's 5th Cycle RHNA allocation was identified and discussed since this RHNA planning period ended in October 2021. In anticipation of the 6th Cycle, the Draft EIR includes Table 4.11-7, SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology (Draft EIR page 4.11-10) and analyzes the Project's contribution to the current planning period in Section 4.11.4, Impact Analysis (Draft EIR page 4.11-17).

Lastly, as described in Chapter 3, Project Description, of the Draft EIR, the Project proposes 263 new housing units. Section 3.3.8, Development Agreement, further states (as the comment indicates) that the Project would provide benefits including some provision of affordable housing in return for a proposed Development Agreement between the City and the Applicant. Moreover, the Draft EIR states "[t]he full benefits will be negotiated between the parties but will not create any environmental impacts"

(Draft EIR page 3-17). As shown above, the Draft EIR adequately analyzes Project consistency with the City's Housing Element and demonstrates the addition of 263 new units would contribute to the City's RHNA allocation for the 6th Cycle (which started in October 2021). Furthermore, the affordable housing provision is outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment." No changes to the Draft EIR's project description or environmental analyses are required. For informational purposes only, the Development Agreement (proposed at the time of drafting these Responses to Additional Comments) is comprised of a total of 32 affordable housing units (12% of the total housing units), including 1 very-low income unit and 14 low income units within PCC South, and 2 very-low income units and 15 low income units in PCC North.

1-25 In summary, this comment requests for the Project's denial and to revise and recirculate the EIR to address the aforementioned concerns.

The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Response 1-26 is for "Exhibit A of A, March 8, 2021 SWAPE Letter to Mitchell M. Tsai"

1-26 In summary, the commenter states that by implementing a local hire provision requiring 10-mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project was anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[1] On-site sources of GHG emissions include off-road equipment and off-site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years consistent with SCAQMD guidance, which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

[1] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Response 1-27 is for "Exhibits B and C of A, Curriculum Vitae for Paul Rosenfeld and Matt Hagemann"

1-27 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

Responses 1-28 to 1-50 are for "Exhibit D of A, SWAPE Letter to Greg Sonstein"

1-28 In summary, the comment states that the Draft EIR fails to adequately evaluate the Project's air quality, health risk, and GHG impacts.

The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-29 In summary, the comment states that changes to the default modeling inputs in the CalEEMod modeling were incorrect and questions the estimated GHG emissions quantified in the Draft EIR and underlying assumptions included in the model.

As specifically identified in the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis" (CAPCOA 2017). As such, the changes to the default CalEEMod assumptions for the project emissions modeling were appropriate based on applicant input and project-specific information.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Project-specific information was applied to the CalEEMod model where appropriate and based on information obtained from the Project applicant regarding site-specific characteristics of the site and Project components. The Project applicant and their contractor(s) represent 'experts' in estimating construction activities for the Project based on their experience with similar projects and their need to estimate construction activities, such as duration of construction and equipment needed, for budgeting. Substantial evidence is defined in the CEQA statute to mean "facts, reasonable assumptions predicated on facts, and expert opinion supported by facts" (14 CCR 15384(b)). Because assumptions provided the Project applicant and their team represent an expert opinion supported by facts, these assumptions constitute substantial evidence under CEQA that can be used to more accurately estimate project-generated emissions.

Regarding operations, Project-specific data was used from the transportation analysis including the Project's trip generation rates for each land use type. The emissions estimates also assume compliance with regulations (state or local) are also taken into account for certain input variables such as compliance with building energy standards and utility renewable energy standards, as adopted by the State of California, some of which are not currently programmed into the model by default since many laws have been updated since the release of the model. Therefore, the use of Project-specific data in CalEEMod is appropriate and fully in line with the CalEEMod User's Guide and the Draft EIR's analysis is based on substantial evidence and is adequate as presented. No revisions to the Draft EIR are required.

Regarding the commenter's question about CalEEMod input consistency with the Draft EIR, please refer to Response to Comment 1-30.

1-30 In summary, the comment states that Appendix C-1 contains model inputs were not consistent with information disclosed in the Draft EIR, specifically that the CalEEMod land use inputs were not consistent with the project description land use metrics.

The minor discrepancy in the modeled inputs have been adjusted for the purpose of responding to this comment and are presented below. As shown, adjustments to CalEEMod have been conducted, which include revisions to the square footage as well as updates to the model. The Draft EIR CalEEMod inputs assumed 314,659 square feet of residential space, 11,000 square feet of commercial/retail space, and 763 parking spaces. The revised CalEEMod inputs assume 327,021 square feet of residential development, 11,252 square feet of commercial/retail uses, and 792 parking spaces.

At the time that the Project's Notice of Preparation (NOP) was released and the time that the analysis was prepared, the version of the CalEEMod was Version 2016.3.2 was the most appropriate and available model to use for the analysis. CalEEMod Version 2020.4.0 was released in June 2021. As with previous updates of CalEEMod, CalEEMod 2020.4.0 includes updates per current industry values and bug fixes. The key changes incorporated into CalEEMod 2020.4.0 were incorporating the CARB EMFAC 2017 update, including the Institute of Transportation Engineers 10th edition trip rates released in 2017, and incorporation of 2019 Title 24 Standards. The results of this re-run of CalEEMod to incorporate the minor discrepancies in the data inputs and the updated CalEEMod are shown below, in comparison to the results shown in the Draft EIR. As shown, the changes in the CalEEMod outputs are negligible when compared to the outputs in the Draft EIR and the significance thresholds. As such, the negligible changes in modeling results shown below are not substantive, do not change the analysis presented in the Draft EIR, do not result in new information, and do not require any revisions to the significance conclusions in the Draft EIR.

A portion of Table 4.2-9 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the estimated maximum daily construction emissions generated during construction of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Maximum Construction Emissions	VOCs	NOx	CO	SOx	PM10	PM2.5
	Pounds per Day					
Draft EIR Maximum Daily Emissions	49.34	41.60	27.18	0.08	4.52	2.61
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	No	No	No	No	No	No
Updated Maximum Daily Emissions	49.05	41.22	27.73	0.07	4.52	2.62
Difference	(0.29)	(0.38)	0.55	(0.01)	0.00	0.01
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-10 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the maximum daily area, energy, and mobile source emissions associated with operation (Year 2025) of the proposed Project as assessed in the Draft EIR as well as the emissions estimated in the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Total Operational Emissions	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Draft EIR Project Total	11.47	19.12	53.79	0.15	10.52	3.25
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No
Updated Project Total	14.54	10.56	69.92	0.13	10.55	3.24
Difference	3.07	(8.56)	16.13	(0.02)	0.03	(0.01)
Threshold exceeded?	No	No	No	No	No	No

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.2-11 from Section 4.2, Air Quality of the Draft EIR is repeated below and includes the localized significance thresholds for construction activities of the proposed Project as assessed in the Draft EIR as well as the emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Draft EIR Project Total	40.50	21.15	2.80	2.44
SCAQMD LST	91	664	5	3
LST exceeded?	No	No	No	No
Updated Construction Emissions	27.52	18.24	1.58	1.23

Additional Data for Draft EIR Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Difference	(12.98)	(2.91)	(1.58)	(1.21)
LST exceeded?	**No**	**No**	**No**	**No**

Notes:
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-3 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the construction GHG emissions for construction activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-3. Estimated Annual Construction Greenhouse Gas Emissions

Total Construction Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	**1,969.95**	**0.28**	**0**	**1,977.08**
Updated Construction Emissions	**1,851.36**	**0.26**	**0**	**1,877.17**
Difference	(118.59)	(0.02)	0	(99.91)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

A portion of Table 4.6-4 from Section 4.6, Greenhouse Gas Emissions of the Draft EIR is repeated below and includes the operational GHG emissions (including the amortized construction emissions) for operational activities of the proposed Project as assessed in the Draft EIR as well as the GHG emissions generated by the updated CalEEMod analysis. Details of the updated emission calculations are provided in Appendix A to this document.

Additional Data for Draft EIR Table 4.6-4. Estimated Annual Operational Greenhouse Gas Emissions

Total Operational Emissions	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Draft EIR Project Total	2,435.45	1.17	0.02	2,920.96
Updated Operational Emissions	**2,443.28**	**1.20**	**0.02**	**2,563.72**
Difference	7.83	0.03	0	(357.24)

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
Emissions noted in parentheses represents a negative number.

The proposed Project's construction health risk assessment (HRA) used the estimated annual construction exhaust PM_{10} emissions as a surrogate for diesel particulate matter (DPM), generated during construction of the Project. As presented in Additional Data for Draft EIR Table 4.2-9 above, the revised estimations of construction emissions indicate that PM_{10} emissions would not change compared to what was estimated in the Draft EIR. Therefore, the results of the HRA for the Project

would remain unchanged and the Project would result in a less than significant impact after implementation of mitigation measure MM-AQ-1.

As discussed in Section 4.4, Energy, of the Draft EIR, fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton CO_2 per gallon. Furthermore, fuel consumption from mobile trips, during both construction and operations, was also estimated by converting the total CO_2 emissions from the construction phase to gallons using the conversion factors for CO_2 to gallons of gasoline or diesel. As presented in Additional Data for Draft EIR Tables 4.6-3 and 4.6-4 above, the revised CO_2 emissions generated during both construction and operations are expected to negligibly change compared to the CO_2 emissions estimated in the Draft EIR. Therefore, the petroleum consumption associated with the proposed Project would not be considered inefficient or wasteful and impacts would remain less than significant impact.

1-31 In summary, the comment states that the Draft EIR did not include the total amount of demolition haul trips required for the Project and claims that the default number of demolition hauling trips was underestimated by 431 trips.

CalEEMod provides default values for input parameters such as for high-turnover restaurant, mid-rise apartments, and retail square footages. After the minimum project characteristic and land use information is inputted, CalEEMod provides default values so that the model may still be used to evaluate emissions from a land use development project in the event that such detailed information is not yet known (for instance, for a project in the planning stage). Similarly, CalEEMod provides a host of default values for the construction emissions analysis. Construction default values were utilized where Project information was not readily available. Default inputs that were updated according to information provided by the applicant include construction schedule phase lengths for major activities (e.g., demolition, grading, building construction, paving, and architectural coating); construction equipment lists for these major activities and hours of usage per day, construction truck and vehicle worker trips, and grading/excavation information. The construction methodology including information provided by the applicant are provided in the Draft EIR beginning on page 4.2-24 in Section 4.2.4, Approach and Methodology and beginning on page 4.6-26, Section 4.6.3, Approach and Methodology.

Haul truck trips during the demolition phase was based on demolition and earthwork quantities provided by the Project's applicant. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. In order to estimate the number of haul trucks from pavement removal, CalRecycle's Construction/Demolition and Inert Debris Tools and Resources rate of 2,400 pounds per cubic yard of debris for asphalt was utilized. Assuming a depth of 4 inches and an area of approximately 3.01 acres of pavement to be removed would result in a volume of approximately 1,939 tons of debris. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 one-way haul trips during the demolition subphase of Phase 2/3. The commenter states that the model should have included 178,660-square-feet of demolition, which is an incorrect assumption. CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips

required for the demotion phase, since the commenter states the total demolition of building material would be 178,660-square-feet. Notably, pavement debris in CalEEMod is expressed as tons of debris, not square footage of the area. Therefore, no changes to the Draft EIR are required.

1-32 In summary, the comment states that the Draft EIR incorrectly estimates the grading acreage.

The Project's total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information. As discussed in Section 3.1, Project Description of the Draft EIR, the total site includes 6.23 acres, which includes the developed hotel properties. As such, 3.88 acres would be subject to grading/construction activities for Phases 1 and 2/3. Contrary to the commenter's assertion, the text included from the CalEEMod User Guide does not demonstrate an insufficiency regarding the analysis presented in the Draft EIR. The total net acreage to be graded of 3.88 acres, as provided by the proposed Project applicant, was used to determine the total area to be graded during each grading phase of the proposed Project. The text emphasized by the commenter appears to expressly condone the use of the total area to be graded as a means of determining the amount of grading needed on the site. Furthermore, each grading phase (Phase 1 and 2/3) is assumed to occur over two months, with multiple pieces of construction equipment working within each of the sites for the duration of the proposed Project's construction. Two-month grading period for each phase with multiple pieces of equipment working within the site, represents a reasonable, if not conservative, approach to analysis for grading a total of 3.88 acres. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-33 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material moisture content contained in the model.

The default values in CalEEMod model for the road dust (e.g., material silt content, material moisture content, and mean vehicle speed) are statewide averages used in the EPA's AP-42 methods for calculating fugitive dust emissions from paved and unpaved roads. Users are able to override the defaults in CalEEMod if data specific to the project is known. Furthermore, local jurisdictions can also provide guidance to users as to what default properly reflects known regional road dust parameters. The proposed Project site is underlain by quaternary Dune Sand deposits, Appendix E of the Draft EIR. It was determined that the proposed Project site is likely to be underlain by similar subsurface sandy materials with a thin cap of artificial fill. Overall, the underlying soils are likely to be comprised of Dune Sand deposits, which has a high concentration of sand that gives them a gritty feel, with varying amount of silt and clay materials that should be slightly moist to moist and loose to very dense. Density is anticipated to increase with depth. The proposed Project would be required to comply with the provisions in SCAQMD Rule 403 to prevent, reduce or mitigate fugitive dust emissions from each grading site. SCAQMD Rule 403 restricts visible fugitive dust to the project property line, restricts the PM10 emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, the proposed Project will utilize one or more of the best available control measures (identified in the tables 1 and 2 of the rule), which may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering of all active sites periodically, maintaining moisture content of exposed soils, using chemical stabilizers and/or ceasing all activities during periods of high wind. Furthermore, the geotechnical due-diligence report indicated that the maximum moisture content of soils sampled was approximately 16.9%. In addition, the percentage of silt in CalEEMod was adjusted based on the UC Davis Soil Resource Laboratory for the Project area. The interactive tool allows for the identification of U.S. Department of Agriculture-National

Cooperative Soil Survey (USDA-NCSS) soil survey data for locations throughout the State. Soils within the Project area would be comprised of approximately 3.7% clay and 93% sand, with the remainder being silt. Therefore, the model was updated based on site specific information the applied moisture content of exposed soils and the excavation materials silt characteristics provided included in the geotechnical due-diligence report by the proposed Project applicant in order to reduce fugitive dust emissions during all graining and earthwork activities per SCAQMD Rule 403. Therefore, the model was updated based on site specific information provided by the proposed Project applicant and no changes to the Draft EIR are required.

1-34 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the material silt content contained in the model.

Please see Responses to Comment 1-33.

1-35 In summary, the comment states that the Draft EIR incorrectly makes adjustments to the haul trips contained in the model. The number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.

The Project's demolition and total acres of grading was accurately estimated in CalEEMod, which is based on Project site specific information provided by the proposed Project applicant. Overall, the proposed Project would result in the grading of 3.88 acres. Construction worker estimates and vendor truck trips by construction phase were based on information provided by the Project applicant. Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided. During Phase 1, it was assumed that 41,660 square feet of buildings and 6,000 square feet of pavement would require demolition. For Phases 2 and 3, it was assumed that a total of 131,000 square feet of pavement would require demolition. Grading is estimated to involve 17,700 cubic yards of soil for export, which would be required for Phase 2. Per information provided by the applicant, the Project was assumed to use haul trucks with a capacity of 20 cubic yards during grading/excavation activities. Therefore, Project was estimated to result in 200 one-way haul trips during the demolition phase of Phase 1. In addition, the Project would result in 200 and 1,720 one-way haul trips during the demolition and grading subphases of Phase 2/3. The commenter states that the model should have included at least 178,660-square-feet of demolition, which is an incorrect assumption (refer to Response to Comment 1-31). CalEEMod estimates demolition trips based on the square footage of buildings to be demolished and/or the tons of debris to be removed. The commenter incorrectly summed the existing buildings square footage with the total pavement area, thus overstating the amount of haul trips required for the demotion phase, since the commenter states the total demolition of building material would be 178,660 square feet. Therefore, no changes to the Draft EIR are required.

1-36 In summary, the comment states that the Draft EIR fails to mention or justify the changes to the construction related architectural coating areas.

The CalEEMod model assumed the default architectural exterior and interior square footages as presented in Appendix C-1 of the Draft EIR. CalEEMod however assumes that the Project's total square footage (325,659 square feet of buildings and 317,850 square feet of parking area) would undergo application of architectural coatings for both Phases 1 and Phases 2/3 concurrently, thus overestimating emissions of volatile organic compounds (VOCs). Therefore, in order to correctly

estimate the application of architectural coatings for both Phase 1 and Phases 2/3, the default exterior and interior square footages were utilized in the model which was reallocated based on the specific development undertaken during Phase 1 and Phases 2/3. As previously discussed, Phase 1 would include development of 3,273 SF of retail and 187 parking spaces; Phase 2 would include development of 120 dwelling units (146,550 SF), 2,056 square feet of retail and 3,700 square feet of restaurant, and 336 parking spaces; and Phase 3 would include development of 143 dwelling units (176,039 SF), 2,223 square feet of retail, and 240 parking spaces. Thus, the interior and exterior architectural square footages used in CalEEMod reflect the specific land use quantities inputted in the land use section of CalEEMod but adjusted for the specific construction phases (Phase 1 and Phases 2/3). Therefore, no changes to the Draft EIR are required.

1-37 In summary, the comment states that the air quality and GHG emissions modeling underestimates the number of weekday and Sunday trips during operations.

The proposed Project's trip generation from Section 4.13, Transportation of the Draft EIR, indicated that the overall trips generated from operations would be 2,517 weekday trips. The CalEEMod data was based on 2,507 trips and has been updated for the purpose of this response, as demonstrated in Response to Comment 1-29, which reflects that the proposed Project would generate approximately 2,517 trips. The air quality and GHG emission calculations modeling were revised as presented in Tables 4.2-10 and Table 4.6-4. Furthermore, the commenters assertion that weekday and Sunday trips were underestimated are incorrect. The Saturday and Sunday trip generation rates were adjusted based on the default proportions allocated in CalEEMod, based on the weekday trip generation rates presented in Table 4.13-1 of Section 4.13, Transportation. As presented in Table 4.2-10 and 4.6-4, the proposed Project-generated criteria air pollutant and GHG emissions would minimally change compared to the output presented in the Draft EIR, assuming the same trip generation from Section 4.13, Transportation. Details of the updated emission calculations are provided in Appendix A to this document.

1-38 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default energy use values, and the model may underestimate the Project's energy-source operational emissions.

Page 4.2-28 of Section 4.2 discusses that the input parameters were adjusted in good faith in compliance with the 2019 Title 24 standards since CalEEMod Version 2016.3.2 assumes compliance with the 2016 Title 24 standards. The 2019 Title 24 standards are the currently applicable building energy efficiency standards that became effective on January 1, 2020. As discussed in Section 4.2, Air Quality (page 4.2-28), the California Energy Commission (CEC) Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings, are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively. The first-year savings for multi-family buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the 2016 standards, the multi-family, savings are 2% of electricity, 8% of demand and 5% of gas. Furthermore, the 2022 Title 24 standards are under development. The 2022 standards focus on four key areas in new construction: encouraging electric heat pump technology and use; establishing electric-ready requirements when natural gas is installed; expanding solar photovoltaic system and battery storage standards; and, strengthening ventilation standards to improve indoor air quality. In August 2021, the CEC adopted the 2022 standards; but, before those standards can become effective,

they must be approved by the California Building Standards Commission. If approved, the 2022 Title 24 standards will go into effect on January 1, 2023. Therefore, the Project would likely need to meet the more stringent 2022 standards. Therefore, no changes to the Draft EIR are required.

1-39 In summary, the comment states that the air quality and GHG emissions modeling included unsubstantiated changes to the default wastewater treatment system percentages. The model assumes that the Project's wastewater would be treated 100% aerobically. The commenter states that the use of 100% aerobic wastewater treatment percentages in the model is incorrect.

As shown on Page 44, Appendix A, Calculation Details for CalEEMod solids produced from aerobic processes are digested in anaerobic digesters; thus, anaerobic facilities are assumed in the CalEEMod aerobic wastewater treatment process (CAPCOA 2017). Furthermore, the wastewater treatment system assumptions are used by CalEEMod to quantify the Project's GHG emissions associated with wastewater treatment. Therefore, no changes to the Draft EIR are required.

1-40 In summary, the comment states that the air quality emissions modeling included these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated.

The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions which was reflected in the modeling's "mitigated" output which would result in a 55% reduction in fugitive dust emissions. As discussed in Section 4.2, Air Quality, of the Draft EIR (page 4.2-14), the Project would be required to comply with all applicable SCAQMD Rules and Regulations, including, but not limited to, Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 403 (Fugitive Dust). Compliance with these rules would minimize fugitive dust generated during Project construction to the maximum extent practical. Therefore, no changes to the Draft EIR are required.

1-41 In summary, the comment states that the CalEEMod operational mitigation measures included in the model are incorrect and may underestimate the Project's operational emissions.

In order to capture the traffic reductions based on the Project's site-specific location, the report on Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures was utilized. It is primarily focused on the quantification of project-level mitigation of GHG emissions associated with land use, transportation, energy use, and other related project areas. The Project would, improve the pedestrian network, this measure will increase the sidewalk coverage to improve pedestrian access. Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive; improve transit access, the proposed Project would provide new living and working opportunities in close proximity to transit, thereby increasing ridership. Public transit that operates in the vicinity of the Project site includes the Metro C Line (formerly Green Line) and multiple bus lines. The Metro C Line is a light rail line running between Redondo Beach and Norwalk, with the closest station approximately 0.51-mile east of the Project site. There are two Metro bus lines, one Beach Cities bus line, and two Los Angeles Department of Transportation (LADOT) Commuter Express lines that run in the vicinity of the Specific Plan area (Metro Line 232; Metro Line 625; Beach Cities Line 109; LADOT Commuter Express 438; and LADOT Commuter Express 574); and would be located in an area with high destination accessibility, the Project site is located within an urbanized portion of the County of Los Angeles with access to housing and employment.

The commenter also states that the water reduction measures applied in CalEEMod was incorrect. The 20x2020 Water Conservation Plan sets forth a statewide road map to maximize the state's urban water efficiency and conservation opportunities between 2009 and 2020, and beyond. It aims to set in motion a range of activities designed to achieve the 20% per capita reduction in urban water demand by 2020. These activities include improving an understanding of the variation in water use across California, promoting legislative initiatives that incentivize water agencies to promote water conservation, and creating evaluation and enforcement mechanisms to assure regional and statewide goals are met. Furthermore, the Project would be required to meet the California Green Building Standards Code, also called the "CALGreen Code." As mandated by law, California buildings must reduce the maximum flow of water by 20% on all plumbing fittings and fixtures. Therefore, a 20% reduction in water usage was applied in CalEEMod in compliance with the CALGreen Code and state water reduction goals.

This commenter also states that the Draft EIR's GHG analysis incorrectly assumes reductions associated with solid waste emissions. The Draft EIR's assumption that the Project would reduce the amount of solid waste that would be landfilled by 50% was based on mandatory compliance with AB 939, AB 341, and AB 1826 (as discussed in Section 4.6, Greenhouse Gas Emissions). The Project would also provide storage areas for recyclables and green waste, as well as food waste storage. Therefore, the Project would comply with AB 939, AB 341, and AB 1826 would ensure that the anticipated solid waste reductions are realized. Therefore, no changes to the Draft EIR are required.

1-42 In summary, the comment states that the Draft EIR diesel particulate matter health risk emissions are inadequately evaluated and their screening-level construction HRA indicates a potentially significant impact.

Regarding the commenter's assertion the construction HRA relies upon a flawed air model, and as discussed in Response to Comments 1-29 through 1-35, the CalEEMod User's Tips documentation, "Users are encouraged to understand the defaults and provide site specific data (e.g., construction schedule, construction equipment type, results of traffic study, predicted water usage, etc.), if available, for a more accurate analysis". As such, the changes to the default CalEEMod assumptions for project emissions modeling were appropriate based on applicant input and Project-specific information.

The commenter also states that the Draft EIR failed to evaluate the Project's operational health risk impacts. The Project would not result in a long-term source of TAC emissions. No residual TAC emissions and corresponding cancer risk are anticipated after construction, and no long-term sources of TAC emissions are anticipated during operation of the Project. Additionally, CARB has published the *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB 2005), which identifies certain types of facilities or sources that may emit substantial quantities of TACs and therefore could conflict with sensitive land uses, such as "schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities." The *Air Quality and Land Use Handbook* is a guide for siting of new sensitive land uses, but it does not mandate specific separation distances to avoid potential health impacts. The enumerated facilities or sources include the following:

- High-traffic freeways and roads
- Distribution centers
- Rail yards
- Ports

- Refineries
- Chrome plating facilities
- Dry cleaners
- Large gas dispensing facilities.

The Project would not include any of the previously listed land uses and would not expose sensitive receptors to TAC emissions from these sources.

Regarding the commenter's assertion that health risk impacts from Project operation should also be evaluated, a 30-year exposure duration vastly exceeds the 6-month requirement set forth by Office of Environmental Health Hazard Assessment (OEHHA). As discussed in the construction HRA (Appendix C-2 of the Draft EIR), the construction HRA was performed in accordance with the OEHHA approved the 2015 Risk Assessment Guidelines Manual (OEHHA 2015). SCAQMD requires that all HRAs prepared for CEQA documents follow SCAQMD policies in conjunction with the 2015 Risk Assessment Guidelines Manual. For the purposes of the construction HRA, given the less-than-lifetime exposure period, and the higher breathing rates and sensitivity of children to construction-generated TACs, the cancer risk calculation assumes that the exposure would affect children early in their lives. For the residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy and occur for 34 months, over the duration of construction activities.

Regarding the commenter's assertion of the incorrect application of construction-related mitigation and failure to adequately analyze health risks associated with DPM, the commenter uses a screening model, known as AERSCREEN, to evaluate health risk impacts from diesel emissions during construction of the proposed Project. While the AERSCREEN model is an acceptable model by the U.S. Environmental Protection Agency's (EPA) and SCAQMD, it is a screening model. As a screening model, it overestimates impacts with the general understanding that if AERSCREEN does not show impacts, then impacts would also not occur if a more detailed analysis is conducted using a more refined model. AERSCREEN is a simplified model in that it does not consider meteorological data or topographical data. AERSCREEN assumes calm wind conditions at all times and a stable atmosphere (i.e., no atmospheric mixing). AERSCREEN also has simplified emissions input fields such that it typically overestimates emission impacts from varying construction activities.

In addition, the SCAQMD does not have guidance requiring that construction and operational health risk be evaluated together. Based on an email from Michael Krause, Planning and Rule Manager with SCAQMD, who is an expert, a project's construction and operational health risks need to be evaluated separately. Thus, the construction HRA is analyzed in accordance with industry guidance and an operational HRA is not necessary.

Further, the comment states that the commenter prepared a screening-level health risk assessment using changed CalEEMod inputs with the assumption that health risks should be combined for construction and operation of the Project. The commenter has not provided any substantive comments that would alter model inputs or the findings of the emissions calculations in the Draft EIR. Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors to a much greater degree than AERSCREEN, which

better represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis was modeled to assume a construction start date of October 2021, which represented the earliest date of construction at the time the analysis was prepared, anticipating when air quality and GHG assessments would be initiated.[2] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024) (USEPA 2016).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

1-43 The commenter states that the Draft EIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion is incorrect.

Please see the following Responses to Comments:

1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model; Please refer to Responses to Comments 1-29 through 1-41.

2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; Please refer to Response to Comment 1-45.

[2] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; Please refer to Response to Comment 1-46.

4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; Please refer to Response to Comment 1-47.

5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS; Please refer to Response to Comment 1-48.

1-44 The commenter states that the modeling underestimates the Project's emissions, and the Draft EIR's quantitative GHG analysis should not be relied upon to determine Project significance.

Please see Responses to Comments 1-29 through 1-41.

1-45 The commenter states that the Draft EIR incorrectly applies the GHG threshold of 3,000 MT CO2e per year.

Regarding the commenters assertion that the Draft EIR used an outdated quantitative GHG threshold, the South Coast Air Quality Management District (SCAQMD) formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2 Consider whether or not the project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year threshold for industrial uses and stationary projects would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per service population for project level analyses and 6.6 MT CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Based on the supporting analysis outlined in SCAQMD's draft GHG guidance and meeting notes, this 3,000 MT CO_2e per year level would capture 90% of GHG emissions from new residential or commercial projects in the region (SCAQMD 2008). This type of market capture analysis captures a substantial fraction of the GHG emissions from future development to accommodate for future population and job growth and excludes small development projects that would contribute a relatively small fraction of the cumulative statewide GHG emissions.

Therefore, the Draft EIR relies on use of the 3,000 MT CO_2e per year threshold because it has been recommended by SCAQMD and SCAQMD is an expert agency in the region. Furthermore, the SCAQMD provides substantial evidence that the thresholds are consistent with policy goals and 2050 GHG emissions reduction targets set by the State. Specifically, the thresholds were set at levels that capture 90% of the GHG emissions form the above-described uses, consistent with Executive Order (EO) S-3-05 target of reducing GHGs to 80% below 1990 levels by 2050. No changes to the Draft EIR are required.

1-46 The commenter states that the Draft EIR would result in potentially significant GHG emissions exceeding the 2030 "Substantial Progress" threshold of 660 MT CO_2e per service population per year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e per service population per year.

Overall, the CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific quantitative thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). State CEQA Guidelines Section 15064.4 states that a lead agency shall make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use, or (2) rely on a qualitative analysis or performance based standards. The City appropriately applied their discretion to apply a numeric GHG threshold recommended by the SCAQMD and is not required to apply alternative thresholds as recommended by the commenter. Regarding the commenters assertion that the Project would result in significant GHG emissions, as presented in Table 4.6-4 of Section 4.6, Greenhouse Gas of the Draft EIR, GHG emissions associated with development of the proposed Project would be below the SCAQMD GHG threshold of 3,000 MT CO_2e per year, with the Project resulting in approximately 2,921 MT CO_2e per year. Response to Comments 29 through 49 discusses the adequacy of the utilized CalEEMod input parameters.

1-47 In summary, the comment states that their modeling indicates that the Project's VMT would exceeds the CARB 2017 Scoping Plan projections for 2010, 2025, and 2030.

CARB released the updated Mobile Source Strategy that demonstrates how the State can simultaneously meet air quality standards, achieve 2030 and 2050 GHG emission reduction targets, decrease health risk, and reduce petroleum consumption from the transportation sector. CARB developed a scenario-based modeling system that was used to identify foreseeable emission reductions associated with existing mobile-source regulations, and to explore different combinations

of further advancements in technologies, fuels, and transportation system efficiencies. This modeling usefully relates VMT and GHG metrics to each other, and can be a useful source of information for planners considering projects using one or the other of these metrics. Specifically, in support of the Mobile Source Strategy, CARB developed two scenarios using the model that are particularly relevant with respect to GHG emissions from the transportation sector. Notably, the baseline scenario represents the mobile-source GHG emissions reductions associated with existing mobile-source controls, regulations, foreseeable deployment of technology, and current projections of VMT included in the existing RTP/SCSs adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375. Furthermore, the Cleaner Technologies and Fuels (CTF) scenario evaluates what level of additional deployment of cleaner vehicle technologies and fuels combined with slower growth in VMT would be necessary to achieve state air quality targets and climate goals of 40% reduction in GHG emissions from 1990 levels by 2030 and 80% by 2050. The existing total VMT per capita (2015-2018 average) was 24.6 and the existing light-duty VMT per capita (2015-2018 average) was 22.2.

As presented in Section 4.13, Transportation, the daily household VMT per capita for the Project -was determined by using the SCAG 2016 RTP/SCS travel demand model (SCAG 2016). The SCAG travel demand model identifies trip purposes as Home-Based Work and Home-Based Other, where trips have been produced by residential land uses and trips have been attracted by nonresidential land uses. The other trip type, Non-Home-Based, is produced and attracted by nonresidential land uses. The average trip length and vehicle trips for all Home-Based Work and Home-Based Other productions are used to calculate the daily household VMT per capita for residential uses.

Residential is already an existing land use in the Transportation Analysis Zones (TAZ) located in the City in which the Project is located, and the model therefore includes residential trips and average trip lengths. It is assumed that the Project's residential trips would have the same characteristics as the existing residential trips in the zone. The VMT per capita assumed for the Project site was therefore based on the vehicle trips and average trip lengths for the TAZ in which the Project is located from the SCAG model, which indicates a daily household VMT per capita of 10.9 for all home-based production trips within the TAZ, which is 23% below the City's VMT of 14.2. As such, the proposed Project's daily household VMT would not conflict with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 State climate goals. Therefore, no changes to the Draft EIR are required and impacts would remain less than significant.

1-48 In summary, the comment states that the Draft EIR does not consider performance-based goals under SCAG's RTP/SCS and SB 375 (e.g., per capita emission targets or VMT per capita benchmarks).

State CEQA Guidelines Section 15064.4 states that a lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency has the discretion to determine, in the context of a particular project, whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. As discussed in the Draft EIR, the City has not adopted quantitative project-level significance thresholds for assessing impacts related to GHG emissions applicable to the proposed Project, therefore, the SCAQMD threshold of 3,000 MT CO_2e was used to assess the Project's GHG emissions as discussed above.

As discussed in Section 4.13, Transportation of the Draft EIR, as the City has not yet adopted new transportation impact study guidelines including the VMT metric and significance criteria in compliance with Senate Bill (SB) 743 guidelines, the impact thresholds used for this Project are based on the Governor's Office of Planning and Research (OPR) guidelines. The proposed Project is estimated to generate 10.9 daily household VMT per capita, which is lower than 15% below the existing City daily household VMT per capita, and the Project was determined to have a less-than-significant VMT impact. Given the less than significant VMT impact, the GHG emissions from per capita VMT associated with the Project are assumed to be consistent with the VMT goals of the 2017 Scoping Plan and SCAG's 2020-2045 RTP/SCS. Furthermore, Impact GHG 4.6b evaluates the consistency of the Project with plans adopted for the purpose of reducing GHG emissions separate from the quantitative analysis. The Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within 2017 Scoping Plan, Assembly Bill (AB) 32, EO S-3-05 and B-30-15, and SCAG's 2020-2045 RTP/SCS. The Specific Plan allows land use designations which creates a mix of land uses that are within walking distance of one another, and introduces retail uses along the Pacific Coast Highway (PCH) to provide streets that are attractive to pedestrians. The Project would promote healthy, walkable communities. Therefore, if the Project would not conflict with these plans, the City would be able to achieve its GHG reduction goals, and, therefore, these plans can be used at a Project level to show that a project would not have a significant cumulative effect on the environment as it relates to GHG impacts.

As the substantial evidence provided on pages 4.6-29 through 4.6-46 of Section 4.6, Greenhouse Gas Emissions, of the Draft EIR shows, the Project would be consistent with the applicable provisions of these plans. Therefore, the Draft EIR properly concludes, based on substantial evidence, that the Project's GHG impacts are less than significant and mitigation measures are not required.

1-49 In summary, the comment states that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further, thus, the Project should incorporate the mitigation measures provided.

Please see Responses to Comment 1-42.

Additionally, it is important to note, 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. (Public Resources Code, § 21002.) As explained by one court: A lead agency's "duty to condition project approval on incorporation of feasible mitigation measures only exists when such measures would [avoid or] 'substantially lessen' a significant environmental effect." (San Franciscans for Reasonable Growth v. City and County of San Francisco (1989) 209 Cal.App.3d 1502, 1519.) "Thus, the agency need not, under CEQA, adopt every nickel and dime mitigation scheme brought to its attention or proposed in the project EIR." (Ibid.) Rather, an EIR should focus on mitigation measures that are feasible, practical, and effective. (Napa Citizens for Honest Government v. Napa County Board of Supervisors (2001) 91 Cal.App.4th 342, 365.). Furthermore, as presented in Section 4.2, Air Quality, and Section 4.6, Greenhouse Gas Emissions, the proposed Project would not result in significant impacts requiring the need for additional mitigation.

1-50 In summary, this comment provides a generic disclaimer about the comment letter. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

Responses 1-51 through 1-52 are for "Attachments A through F of Exhibit D of A"

1-51 The commenter provided their own health risk, air quality, and GHG calculations to determine significance of the Project due to construction and operations. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

1-52 In summary, this comment provides the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No further response is required.

Response 1-53 is for "Exhibit B, April 12, 2021 SWRCC Letter"

1-53 This comment represents a copy of an email from the commenter to the City dated April 12, 2021 with a reference to an attachment. The City assumes the attachment is in reference to the aforementioned comments. No further response is provided.

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Comment Letter 2

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December 9, 2021

Chair Ryan Baldino and
Honorable Members of the Planning Commission
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City of El Segundo
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Re: Comment on Final Environmental Impact Report, Pacific Coast Commons Specific Plan (SCH# 2020050508)

Dear Chair Baldino, Honorable Members of the Planning Commission, and Mr. Samaras:

I am writing on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Final Environmental Impact Report ("FEIR") prepared for the Project known as Pacific Coast Commons Specific Plan, aka SCH# 2020050508, including all actions related or referring to the proposed demolition of existing surface parking lots and construction of a new mixed use development located at 401-575 N. Pacific Coast Highway (PCH) and the parking lot on 600-block of PCH in the City of El Segundo ("Project").

2-1

After reviewing the FEIR, we conclude that the FEIR fails as an informational document, fails to adequately analyze the Project's environmental impacts, and fails to impose all feasible mitigation measures to reduce the Project's impacts. SAFER requests that the Planning Division address these shortcomings in a revised environmental impact report ("REIR") and recirculate the REIR prior to considering approvals for the Project.

This comment has been prepared with the assistance of Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH (Exhibit A). Mr. Offermann's comments are incorporated herein by reference.

I. PROJECT DESCRIPTION

2-2

The Specific Plan area for this Project consists of eight parcels which total 6.385 gross acres. Current developments onsite include the Fairfield Inn and Suites Hotel and the

Aloft Hotel, as well as surface parking lots. The Project would redevelop existing surface parking lots and a portion of the Fairfield Inn and Suites Hotel and would create five new land use districts. The site is bounded by Los Angeles International Airport to the north and residential communities to the east and south.

The Specific Plan allows for the following: (1) the continued operation of the Fairfield Inn and Suites Hotel and Aloft Hotel, which contain 596 rooms within 288,767 square feet of hotel development; (2) 327,021 square feet of residential development for 263 new housing units, including 257 multi-family apartments and six condominium/ townhomes; (3) 11,252 square feet of new commercial/retail uses; and (4) three new parking structures that would contain approximately 792 parking stalls. Construction activities would last approximately 34 months.

2-2 Cont.

II. LEGAL BACKGROUND

CEQA requires that an agency analyze the potential environmental impacts of its proposed actions in an environmental impact report ("EIR") (except in certain limited circumstances). *See, e.g.* Pub. Res. Code § 21100. The EIR is the very heart of CEQA. *Dunn-Edwards v. BAAQMD* (1992) 9 Cal.App.4th 644, 652. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal. App. 4th 98, 109.

CEQA has two primary purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 Cal. Code Regs. ("CEQA Guidelines") § 15002(a)(1). "Its purpose is to inform the public and its responsible officials of the environmental 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. 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.

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures. CEQA Guidelines § 15002(a)(2) and (3); *see also, Berkeley Jets*, 91 Cal.App.4th at pp. 1344, 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564. The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or

2-3

significantly reduced." CEQA Guidelines §15002(a)(2). If the project will have a significant effect on the environment, the agency may approve the project only if it finds 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." Pub. Res. Code § 21081; 14 Cal.Code Regs. § 15092(b)(2)(A) & (B). The lead agency may deem a particular impact to be insignificant only if it produces rigorous analysis and concrete substantial evidence justifying the finding. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 732.

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. A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal. App. 4th at p. 1355 (emphasis added) (quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, 391 409, fn. 12). As the court stated in *Berkeley Jets*:

> A prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process." (*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal. App. 4th 1109, 1117; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal. App. 4th 931, 946.)

2-3 Cont.

More recently, the California Supreme Court has emphasized that:

> When reviewing whether a discussion is sufficient to satisfy CEQA, a court must be satisfied that the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.

Sierra Club v. Cty. of Fresno (2018) 6 Cal.5th 502, 510 (2018), citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405. "Whether or not the alleged inadequacy is the complete omission of a required discussion or a patently inadequate one-paragraph discussion devoid of analysis, the reviewing court must decide whether the EIR serves its purpose as an informational document." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. Although an agency has discretion to decide the manner of discussing potentially significant effects in an EIR, "a reviewing court must determine whether the discussion of a potentially significant effect is sufficient or insufficient, i.e., whether the EIR comports with its intended function of including 'detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'" 6 Cal.5th at 516, citing *Bakersfield Citizens for*

Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1197. "The determination whether a discussion is sufficient is not solely a matter of discerning whether there is substantial evidence to support the agency's factual conclusions." 6 Cal.5th at 516. Whether a discussion of a potential impact is sufficient "presents a mixed question of law and fact. As such, it is generally subject to independent review. However, underlying factual determinations—including, for example, an agency's decision as to which methodologies to employ for analyzing an environmental effect—may warrant deference." *Sierra Club v. Cty. of Fresno*, 6 Cal.5th at 516. As the Court emphasized:

> [W]hether a description of an environmental impact is insufficient because it lacks analysis or omits the magnitude of the impact is not a substantial evidence question. A conclusory discussion of an environmental impact that an EIR deems significant can be determined by a court to be inadequate as an informational document without reference to substantial evidence.

Sierra Club v. Cty. of Fresno, 6 Cal.5th at 514. We find that the FEIR prepared by the City here is inadequate for the reasons set forth below.

2-3 Cont.

III. DISCUSSION

A. There is Substantial Evidence that the Project Will Have a Significant Health Risk Impact from its Indoor Air Quality Impacts.

Certified Industrial Hygienist, Francis "Bud" Offermann, PE, CIH, has conducted a review of the proposed Project and relevant documents regarding the Project's indoor air emissions. Indoor Environmental Engineering Comments (Exhibit A). Mr. Offermann concludes that it is likely that the Project will expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde. Mr. Offermann is a leading expert on indoor air quality and has published extensively on the topic. Mr. Offermann's expert comments and curriculum vitae are attached as Exhibit A.

Mr. Offermann explains that many composite wood products used in building materials and furnishings commonly found in offices, warehouses, residences, and hotels contain formaldehyde-based glues which off-gas formaldehyde over a very long time period. He states, "[t]he primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims." Ex. A, p. 2-3.

2-4

Formaldehyde is a known human carcinogen. Mr. Offermann states that future residents of the Project would be exposed to a 120 in one million risk, assuming all materials are compliant with the California Air Resources Board's formaldehyde airborne toxics control measure. *Id.* at 4. As for commercial employees, he estimates an exposure level of 17.7 in one million. *Id.* at 5. These potential exposure level exceeds the South Coast Air Quality Management District's ("SCAQMD") CEQA significance threshold for airborne cancer risk of 10 per million.

Mr. Offermann concludes that these significant environmental impacts should be analyzed in the EIR and mitigation measures should be imposed to reduce the risk of formaldehyde exposure. *Id.* Mr. Offermann identifies mitigation measures that are available to reduce these significant health risks, including the installation of air filters and a requirement that the applicant use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins in the buildings' interiors. *Id.* at 12.

Mr. Offermann also notes that because of the Project's close proximity to roads with moderate to high traffic and to air traffic from the nearby Los Angeles International Airport, the project is sound impacted. It will therefore require a "mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors," so as to allow occupants the discretion to control exterior noise. *Id.* at 11.

2-4
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The City has a duty to investigate issues relating to a project's potential environmental impacts, especially those issues raised by an expert's comments. *See Cty. Sanitation Dist. No. 2 v. Cty. of Kern*, (2005) 127 Cal.App.4th 1544, 1597–98 ("under CEQA, the lead agency bears a burden to investigate potential environmental impacts"). In addition to assessing the Project's potential health impacts to residents and employees, Mr. Offermann identifies the investigatory path that the City should be following in developing an EIR to more precisely evaluate the Project's future formaldehyde emissions and establishing mitigation measures that reduce the cancer risk below the SCAQMD level. Such an analysis would be similar in form to the air quality modeling and traffic modeling typically conducted as part of a CEQA review.

The failure to address the project's formaldehyde emissions is contrary to the California Supreme Court's decision in *California Building Industry Ass'n v. Bay Area Air Quality Mgmt. Dist.* (2015) 62 Cal.4th 369, 386 ("*CBIA*"). At issue in *CBIA* was whether the Air District could enact CEQA guidelines that advised lead agencies that they must analyze the impacts of adjacent environmental conditions on a project. The Supreme Court held that CEQA does not generally require lead agencies to consider the environment's effects on a project. *CBIA*, 62 Cal.4th at 800-801. However, to the extent a project may exacerbate existing adverse environmental conditions at or near a project site, those would still have to be considered pursuant to CEQA. *Id.* at 801 ("CEQA calls upon an agency to evaluate

existing conditions in order to assess whether a project could exacerbate hazards that are already present"). In so holding, the Court expressly held that CEQA's statutory language required lead agencies to disclose and analyze "impacts on ***a project's users or residents*** that arise ***from the project's effects*** on the environment." *Id.* at 800 (emphasis added).

The carcinogenic formaldehyde emissions identified by Mr. Offermann are not an existing environmental condition. Those emissions to the air will be from the Project. Residents and commercial employees will be users of the Project. Rather than excusing the City from addressing the impacts of carcinogens emitted into the indoor air from the project, the Supreme Court in *CBIA* expressly finds that this type of effect by the project on the environment and a "project's users" must be addressed in the CEQA process.

The Supreme Court's reasoning is well-grounded in CEQA's statutory language. CEQA expressly includes a project's effects on human beings as an effect on the environment that must be addressed in an environmental review. "Section 21083(b)(3)'s express language, for example, requires a finding of a 'significant effect on the environment' (§ 21083(b)) whenever the 'environmental effects of a project will cause substantial adverse effects *on human beings*, either directly or indirectly.'" *CBIA*, 62 Cal.4th at 800 (emphasis in original). Likewise, "the Legislature has made clear—in declarations accompanying CEQA's enactment—that public health and safety are of great importance in the statutory scheme." *Id.*, citing e.g., §§ 21000, subds. (b), (c), (d), (g), 21001, subds. (b), (d). It goes without saying that the future residents and employees of the Project are human beings and the health and safety of those residents and workers is as important to CEQA's safeguards as that of other nearby residents currently living near the project site.

The City's EIR must disclose and mitigate the potential environmental impacts to future users of the building.

2-4 Cont.

B. There is Substantial Evidence that the Project will have Significant Adverse Air Quality, Health Risk, and Greenhouse Gas Impacts

1. The DEIR Relied on Unsubstantiated Input Parameters to Estimate Project Emissions and Thus the Project May Result in Significant Air Quality Impacts.

The Southwest Regional Council of Carpenters submitted a public comment on April 12, 2021 which was supported by the comments of expert environmental consulting firm SWAPE. (Exhibit B). Matt Hagemann, P.G., C.Hg., and Dr. Paul E. Rosenfeld, Ph.D., of the environmental consulting firm SWAPE reviewed the DEIR's analysis of the Project's impacts on air quality, health risk, and greenhouse gases. SAFER joins the Carpenters' comment and SWAPE's comment, the latter of which is incorporated by reference herein.

2-5

SWAPE found that the DEIR incorrectly estimated the Project's construction and operational emissions and therefore cannot be relied upon to determine the significance of the Project's impacts on local and regional air quality. The DEIR relies on emissions calculated from the California Emissions Estimator Version CalEEMod.2016.3.2 ("CalEEMod"). DEIR, p. 4.2-1. This model, which is used to generate a project's construction and operational emissions, relies on recommended default values based on site specific information related to a number of factors. SWAPE comment, p. 1. CEQA requires any changes to the default values to be justified by substantial evidence. *Id.* at 1-2.

SWAPE reviewed the DEIR's CalEEMod output files and found that the values input into the model were inconsistent with information provided in the DEIR. *Id.* at 2. As a result, the DEIR's air quality analysis cannot be relied upon to determine the Project's emissions.

Specifically, SWAPE found that the following values used in the DEIR's air quality analysis were either inconsistent with information provided in the DEIR or otherwise unjustified:

1. Underestimated Land Use Sizes. SWAPE comment, p. 2.
2. Failure to Model All Required Demolition. *Id.* at p. 3-4.
3. Unsubstantiated Changes to Acres of Grading Values. *Id.* at 4-5.
4. Unsubstantiated Changes to Material Moisture Content Bulldozing Values. *Id.* at 5-6.
5. Unsubstantiated Changes to Material Silt Content Values. *Id.* at 6-7.
6. Unsubstantiated Changes to Hauling Trip Numbers. *Id.* at 7-8.
7. Unsubstantiated Changes to Architectural and Area Coating Areas. *Id.* at 8-9.
8. Underestimated Operational Vehicle Trip Rates. *Id.* at 10-11.
9. Unsubstantiated Changes to Energy Use Values. *Id.* at 11.
10. Unsubstantiated Changes to Wastewater Treatment System Percentages. *Id.* at 12.
11. Incorrect Application of Construction-Related Mitigation Measures. *Id.* at 13-14.
12. Incorrect Application of Mobile-Related Operational Mitigation Measures. *Id.* at 14-15.

As a result of these errors in the DEIR, the Project's construction and operational emissions were underestimated and cannot be relied upon to determine the significance of the Project's air quality impacts.

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2. There is Substantial Evidence that the Project May Have a Significant Health Impact as a Result of Diesel Particulate Emissions.

One of the primary emissions of concern regarding health effects for land development projects is diesel particulate matter ("DPM"), which can be released during Project construction and operation. DPM consists of fine particles with a diameter less than 2.5 micrometers including a subgroup of ultrafine particles (with a diameter less than 0.1

2-6

micrometers). Diesel exhaust also contains a variety of harmful gases and cancer-causing substances. Exposure to DPM is a recognized health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. According to the California Air Resources Board ("CARB"), DPM exposure may lead to the following adverse health effects: aggravated asthma; chronic bronchitis; increased respiratory and cardiovascular hospitalizations; decreased lung function in children; lung cancer; and premature deaths for those with heart or lung disease.[1]

The DEIR concluded that the mitigated excess cancer risk posed by the Project to nearby sensitive receptors would not exceed the SCAQMD significance threshold of 10 in one million, and that the Project would result in a less-than-significant operational health risk impact. SWAPE comment, p. 15; DEIR, p. 4.2-38. SWAPE identifies four main reasons for why the DEIR's evaluation of health risk impacts and less-than-significant conclusion is incorrect.

First, the DEIR's construction HRA is incorrect due to its reliance on an exhaust PM_{10} estimate from a flawed air model. SWAPE comment, p. 16. The DEIR's HRA uses an underestimated DPM concentration, and therefore underestimates the Project's cancer risk and cannot be relied upon to determine impacts of the Project. *Id.*

Second, the DEIR did not evaluate the Project's toxic air contaminants (TACs) and associated health risk impacts. *Id.* The Traffic Impact Analysis indicates the generation of an estimated 2,517 average daily vehicle trips, but the DEIR fails to discuss potential TACs associated with Project operation or indicate the levels at which pollutants would trigger adverse health effects. *Id.* In failing to connect TAC emissions to potential health risks to nearby receptors, the Project fails to meet the CEQA requirement that projects correlate increases in project-generated emissions to adverse impacts on human health caused by those emissions. *See Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 510.

Third, the California Department of Justice recommends the preparation of a quantitative HRA pursuant to the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines. OEHHA released its most recent guidance document in 2015 describing which types of projects warrant preparation of an HRA. *See* "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/hotspots2015.html. The OEHHA document recommends that if a project is expected to last over 6 months, the exposure should be evaluated throughout the project using a 30-year exposure duration to estimate individual cancer risks. SWAPE letter, p. 16. Based on its extensive experience, SWAPE reasonably assumes that the

2-6 Cont.

[1] *See* CARB Resources - Overview: Diesel Exhaust & Health, available at https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health).

Project will last at least 30 years, and therefore recommends that health risk impacts from the project be evaluated. *Id.* A Revised EIR is therefore required to analyze these impacts.

Fourth, the FEIR fails to evaluate the "*cumulative* lifetime cancer risk to nearby, existing receptors as a result of Project *construction and operation together*." SWAPE comment, p. 17 (emphasis in original). A Revised EIR should be prepared to quantify the cumulative excess cancer risk posed by the Project's construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million. *Id.*

SWAPE prepared a screening-level HRA to evaluate potential impacts from Project construction using AERSCREEN, a screening-level air quality dispersion model. SWAPE comment, p. 17. SWAPE applied a sensitive receptor distance of 125 meters and analyzed impacts to individuals at different stages of life based on OEHHA and SCAQMD guidance utilizing age sensitivity factors. *Id.* at 17-19. SWAPE found that the excess cancer risks at a sensitive receptor located approximately 125 meters away over the course of Project construction and operation is **approximately 79 in one million**. *Id.* at 19. This risk appreciably exceeds SCAQMD's threshold of 10 in one million.

SWAPE's analysis constitutes substantial evidence that the Project may have a significant health impact as a result of diesel particulate emissions. SWAPE recommends that an updated EIR be prepared which includes "a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation." *Id.*

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3. The DEIR Failed to Adequately Analyze the Project's Greenhouse Gas Impacts and Thus the Project May Result in Significant Greenhouse Gas Emissions.

The DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 metric tons of carbon dioxide equivalent per year ("MT CO2e/year"). The DEIR also relies on the Project's consistency with the City of El Segundo Climate Action Plan, SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32 to conclude the Project would have less-than-significant GHG impacts. SWAPE comment, p. 20; DEIR, p. 4.6-29 – 4.6-48. However, SWAPE states that the DEIR's conclusion about a less-than-significant greenhouse gas impact is incorrect for several reasons:

1. The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
2. The DEIR's quantitative GHG analysis relies upon an outdated threshold;
3. The DEIR's unsubstantiated air model indicates a potentially significant impact;
4. The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and

2-7

5. The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

SWAPE comment, p. 20-27. SWAPE's analysis demonstrates potentially significant health risk and GHG impacts from the project that necessitate mitigation, and it proposes several feasible mitigation measures from CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* to reduce these impacts. *Id.* at 27. In addition to implementing these measures, the Revised EIR should include an updated air quality, health risk, and GHG analysis.

2-7 Cont.

I. CONCLUSION

For the foregoing reasons, SAFER believes that the EIR is wholly inadequate. SAFER urges the Planning Commission to refrain from recommending certification of the FEIR or recommending approval of the Project in order to allow staff additional time to address the concerns raised herein. Thank you for considering our comments and please include this letter in the record of proceedings for this project.

2-8

Sincerely,

Rebecca Davis

EXHIBIT A

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Date: November 12, 2021

To: Rebecca Davis
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From: Francis J. Offermann PE CIH

Subject: Indoor Air Quality: Pacific Coast Commons Project, El Segundo, CA
(IEE File Reference: P-4516)

Pages: 19

Indoor Air Quality Impacts

2-9

Indoor air quality (IAQ) directly impacts the comfort and health of building occupants, and the achievement of acceptable IAQ in newly constructed and renovated buildings is a well-recognized design objective. For example, IAQ is addressed by major high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014). Indoor air quality in homes is particularly important because occupants, on average, spend approximately ninety percent of their time indoors with the majority of this time spent at home (EPA, 2011). Some segments of the population that are most susceptible to the effects of poor IAQ, such as the very young and the elderly, occupy their homes almost continuously. Additionally, an increasing number of adults are working from home at least some of the time during the workweek. Indoor air quality also is a serious concern for workers in hotels, offices and other business establishments.

The concentrations of many air pollutants often are elevated in homes and other buildings relative to outdoor air because many of the materials and products used indoors contain and release a variety of pollutants to air (Hodgson et al., 2002; Offermann and Hodgson,

2011). With respect to indoor air contaminants for which inhalation is the primary route of exposure, the critical design and construction parameters are the provision of adequate ventilation and the reduction of indoor sources of the contaminants.

Indoor Formaldehyde Concentrations Impact. In the California New Home Study (CNHS) of 108 new homes in California (Offermann, 2009), 25 air contaminants were measured, and formaldehyde was identified as the indoor air contaminant with the highest cancer risk as determined by the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), No Significant Risk Levels (NSRL) for carcinogens. The NSRL is the daily intake level calculated to result in one excess case of cancer in an exposed population of 100,000 (i.e., ten in one million cancer risk) and for formaldehyde is 40 µg/day. The NSRL concentration of formaldehyde that represents a daily dose of 40 µg is 2 µg/m^3, assuming a continuous 24-hour exposure, a total daily inhaled air volume of 20 m^3, and 100% absorption by the respiratory system. All of the CNHS homes exceeded this NSRL concentration of 2 µg/m^3. The median indoor formaldehyde concentration was 36 µg/m^3, and ranged from 4.8 to 136 µg/m^3, which corresponds to a median exceedance of the 2 µg/m^3 NSRL concentration of 18 and a range of 2.3 to 68.

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Therefore, the cancer risk of a resident living in a California home with the median indoor formaldehyde concentration of 36 µg/m^3, is 180 per million as a result of formaldehyde alone. The CEQA significance threshold for airborne cancer risk is 10 per million, as established by the South Coast Air Quality Management District (SCAQMD, 2015).

Besides being a human carcinogen, formaldehyde is also a potent eye and respiratory irritant. In the CNHS, many homes exceeded the non-cancer reference exposure levels (RELs) prescribed by California Office of Environmental Health Hazard Assessment (OEHHA, 2017b). The percentage of homes exceeding the RELs ranged from 98% for the Chronic REL of 9 µg/m^3 to 28% for the Acute REL of 55 µg/m^3.

The primary source of formaldehyde indoors is composite wood products manufactured with urea-formaldehyde resins, such as plywood, medium density fiberboard, and

particleboard. These materials are commonly used in building construction for flooring, cabinetry, baseboards, window shades, interior doors, and window and door trims.

In January 2009, the California Air Resources Board (CARB) adopted an airborne toxics control measure (ATCM) to reduce formaldehyde emissions from composite wood products, including hardwood plywood, particleboard, medium density fiberboard, and also furniture and other finished products made with these wood products (California Air Resources Board 2009). While this formaldehyde ATCM has resulted in reduced emissions from composite wood products sold in California, they do not preclude that homes built with composite wood products meeting the CARB ATCM will have indoor formaldehyde concentrations below cancer and non-cancer exposure guidelines.

A follow up study to the California New Home Study (CNHS) was conducted in 2016-2018 (Singer et. al., 2019), and found that the median indoor formaldehyde in new homes built after 2009 with CARB Phase 2 Formaldehyde ATCM materials had lower indoor formaldehyde concentrations, with a median indoor concentrations of 22.4 $\mu g/m^3$ (18.2 ppb) as compared to a median of 36 $\mu g/m^3$ found in the 2007 CNHS. Unlike in the CNHS study where formaldehyde concentrations were measured with pumped DNPH samplers, the formaldehyde concentrations in the HENGH study were measured with passive samplers, which were estimated to under-measure the true indoor formaldehyde concentrations by approximately 7.5%. Applying this correction to the HENGH indoor formaldehyde concentrations results in a median indoor concentration of 24.1 $\mu g/m^3$, which is 33% lower than the 36 $\mu g/m^3$ found in the 2007 CNHS.

Thus, while new homes built after the 2009 CARB formaldehyde ATCM have a 33% lower median indoor formaldehyde concentration and cancer risk, the median lifetime cancer risk is still 120 per million for homes built with CARB compliant composite wood products. This median lifetime cancer risk is more than 12 times the OEHHA 10 in a million cancer risk threshold (OEHHA, 2017a).

With respect to the Pacific Coast Commons Project, El Segundo, CA the buildings consist of residential and commercial spaces.

3 of 19

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The residential occupants will potentially have continuous exposure (e.g. 24 hours per day, 52 weeks per year). These exposures are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in residential construction.

Because these residences will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor residential formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the residential occupants inhale 20 m^3 of air per day, the average 70-year lifetime formaldehyde daily dose is 482 µg/day for continuous exposure in the residences. This exposure represents a cancer risk of 120 per million, which is more than 12 times the CEQA cancer risk of 10 per million. For occupants that do not have continuous exposure, the cancer risk will be proportionally less but still substantially over the CEQA cancer risk of 10 per million (e.g. for 12/hour/day occupancy, more than 6 times the CEQA cancer risk of 10 per million).

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The employees of the commercial spaces are expected to experience significant indoor exposures (e.g., 40 hours per week, 50 weeks per year). These exposures for employees are anticipated to result in significant cancer risks resulting from exposures to formaldehyde released by the building materials and furnishing commonly found in offices, warehouses, residences and hotels.

Because the commercial spaces will be constructed with CARB Phase 2 Formaldehyde ATCM materials, and be ventilated with the minimum code required amount of outdoor air, the indoor formaldehyde concentrations are likely similar to those concentrations observed in residences built with CARB Phase 2 Formaldehyde ATCM materials, which is a median of 24.1 $\mu g/m^3$ (Singer et. al., 2020)

Assuming that the employees of commercial spaces work 8 hours per day and inhale 20 m^3 of air per day, the formaldehyde dose per work-day at the offices is 161 µg/day.

Assuming that these employees work 5 days per week and 50 weeks per year for 45 years (start at age 20 and retire at age 65) the average 70-year lifetime formaldehyde daily dose is 70.9 µg/day.

This is 1.77 times the NSRL (OEHHA, 2017a) of 40 µg/day and represents a cancer risk of 17.7 per million, which exceeds the CEQA cancer risk of 10 per million. This impact should be analyzed in an environmental impact report ("EIR"), and the agency should impose all feasible mitigation measures to reduce this impact. Several feasible mitigation measures are discussed below and these and other measures should be analyzed in an EIR.

Appendix A, Indoor Formaldehyde Concentrations and the CARB Formaldehyde ATCM, provides analyses that show utilization of CARB Phase 2 Formaldehyde ATCM materials will not ensure acceptable cancer risks with respect to formaldehyde emissions from composite wood products.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

The following describes a method that should be used, prior to construction in the environmental review under CEQA, for determining whether the indoor concentrations resulting from the formaldehyde emissions of specific building materials/furnishings selected exceed cancer and non-cancer guidelines. Such a design analyses can be used to identify those materials/furnishings prior to the completion of the City's CEQA review and project approval, that have formaldehyde emission rates that contribute to indoor

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concentrations that exceed cancer and non-cancer guidelines, so that alternative lower emitting materials/furnishings may be selected and/or higher minimum outdoor air ventilation rates can be increased to achieve acceptable indoor concentrations and incorporated as mitigation measures for this project.

Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment

This formaldehyde emissions assessment should be used in the environmental review under CEQA to assess the indoor formaldehyde concentrations from the proposed loading of building materials/furnishings, the area-specific formaldehyde emission rate data for building materials/furnishings, and the design minimum outdoor air ventilation rates. This assessment allows the applicant (and the City) to determine, before the conclusion of the environmental review process and the building materials/furnishings are specified, purchased, and installed, if the total chemical emissions will exceed cancer and non-cancer guidelines, and if so, allow for changes in the selection of specific material/furnishings and/or the design minimum outdoor air ventilations rates such that cancer and non-cancer guidelines are not exceeded.

2-9 Cont.

1.) Define Indoor Air Quality Zones. Divide the building into separate indoor air quality zones, (IAQ Zones). IAQ Zones are defined as areas of well-mixed air. Thus, each ventilation system with recirculating air is considered a single zone, and each room or group of rooms where air is not recirculated (e.g. 100% outdoor air) is considered a separate zone. For IAQ Zones with the same construction material/furnishings and design minimum outdoor air ventilation rates. (e.g. hotel rooms, apartments, condominiums, etc.) the formaldehyde emission rates need only be assessed for a single IAQ Zone of that type.

2.) Calculate Material/Furnishing Loading. For each IAQ Zone, determine the building material and furnishing loadings (e.g., m^2 of material/m^2 floor area, units of furnishings/m^2 floor area) from an inventory of all potential indoor formaldehyde sources, including flooring, ceiling tiles, furnishings, finishes, insulation, sealants, adhesives, and any products constructed with composite wood products containing urea-formaldehyde resins (e.g., plywood, medium density fiberboard, particleboard).

3.) Calculate the Formaldehyde Emission Rate. For each building material, calculate the formaldehyde emission rate (µg/h) from the product of the area-specific formaldehyde emission rate (µg/m^2-h) and the area (m^2) of material in the IAQ Zone, and from each furnishing (e.g. chairs, desks, etc.) from the unit-specific formaldehyde emission rate (µg/unit-h) and the number of units in the IAQ Zone.

NOTE: As a result of the high-performance building rating systems and building codes (California Building Standards Commission, 2014; USGBC, 2014), most manufacturers of building materials furnishings sold in the United States conduct chemical emission rate tests using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), or other equivalent chemical emission rate testing methods. Most manufacturers of building furnishings sold in the United States conduct chemical emission rate tests using ANSI/BIFMA M7.1 Standard Test Method for Determining VOC Emissions (BIFMA, 2018), or other equivalent chemical emission rate testing methods.

CDPH, BIFMA, and other chemical emission rate testing programs, typically certify that a material or furnishing does not create indoor chemical concentrations in excess of the maximum concentrations permitted by their certification. For instance, the CDPH emission rate testing requires that the measured emission rates when input into an office, school, or residential model do not exceed one-half of the OEHHA Chronic Exposure Guidelines (OEHHA, 2017b) for the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017). These certifications themselves do not provide the actual area-specific formaldehyde emission rate (i.e., µg/m^2-h) of the product, but rather provide data that the formaldehyde emission rates do not exceed the maximum rate allowed for the certification. Thus, for example, the data for a certification of a specific type of flooring may be used to calculate that the area-specific emission rate of formaldehyde is less than 31 µg/m^2-h, but not the actual measured specific emission rate, which may be 3, 18, or 30 µg/m^2-h. These area-specific emission rates determined from the product certifications of CDPH, BIFA, and other certification programs can be used as an initial estimate of the formaldehyde emission rate.

2-9 Cont.

If the actual area-specific emission rates of a building material or furnishing is needed (i.e. the initial emission rates estimates from the product certifications are higher than desired), then that data can be acquired by requesting from the manufacturer the complete chemical emission rate test report. For instance if the complete CDPH emission test report is requested for a CDHP certified product, that report will provide the actual area-specific emission rates for not only the 35 specific VOCs, including formaldehyde, listed in Table 4-1 of the CDPH test method (CDPH, 2017), but also all of the cancer and reproductive/developmental chemicals listed in the California Proposition 65 Safe Harbor Levels (OEHHA, 2017a), all of the toxic air contaminants (TACs) in the California Air Resources Board Toxic Air Contamination List (CARB, 2011), and the 10 chemicals with the greatest emission rates.

Alternatively, a sample of the building material or furnishing can be submitted to a chemical emission rate testing laboratory, such as Berkeley Analytical Laboratory (https://berkeleyanalytical.com), to measure the formaldehyde emission rate.

4.) Calculate the Total Formaldehyde Emission Rate. For each IAQ Zone, calculate the total formaldehyde emission rate (i.e. µg/h) from the individual formaldehyde emission rates from each of the building material/furnishings as determined in Step 3.

5.) Calculate the Indoor Formaldehyde Concentration. For each IAQ Zone, calculate the indoor formaldehyde concentration (µg/m³) from Equation 1 by dividing the total formaldehyde emission rates (i.e. µg/h) as determined in Step 4, by the design minimum outdoor air ventilation rate (m³/h) for the IAQ Zone.

$$C_{in} = \frac{E_{total}}{Q_{oa}} \quad \text{(Equation 1)}$$

where:

C_{in} = indoor formaldehyde concentration (µg/m³)

E_{total} = total formaldehyde emission rate (µg/h) into the IAQ Zone.

Q_{oa} = design minimum outdoor air ventilation rate to the IAQ Zone (m³/h)

The above Equation 1 is based upon mass balance theory, and is referenced in Section

2-9 Cont.

3.10.2 "Calculation of Estimated Building Concentrations" of the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017).

6.) Calculate the Indoor Exposure Cancer and Non-Cancer Health Risks. For each IAQ Zone, calculate the cancer and non-cancer health risks from the indoor formaldehyde concentrations determined in Step 5 and as described in the OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines; Guidance Manual for Preparation of Health Risk Assessments (OEHHA, 2015).

7.) Mitigate Indoor Formaldehyde Exposures of exceeding the CEQA Cancer and/or Non-Cancer Health Risks. In each IAQ Zone, provide mitigation for any formaldehyde exposure risk as determined in Step 6, that exceeds the CEQA cancer risk of 10 per million or the CEQA non-cancer Hazard Quotient of 1.0.

Provide the source and/or ventilation mitigation required in all IAQ Zones to reduce the health risks of the chemical exposures below the CEQA cancer and non-cancer health risks.

2-9 Cont.

Source mitigation for formaldehyde may include:

1.) reducing the amount materials and/or furnishings that emit formaldehyde
2.) substituting a different material with a lower area-specific emission rate of formaldehyde

Ventilation mitigation for formaldehyde emitted from building materials and/or furnishings may include:

1.) increasing the design minimum outdoor air ventilation rate to the IAQ Zone.

NOTE: Mitigating the formaldehyde emissions through use of less material/furnishings, or use of lower emitting materials/furnishings, is the preferred mitigation option, as mitigation with increased outdoor air ventilation increases initial and operating costs associated with the heating/cooling systems.

Further, we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers," (CDPH, 2017), and use the procedure described earlier above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Outdoor Air Ventilation Impact. Another important finding of the CNHS, was that the outdoor air ventilation rates in the homes were very low. Outdoor air ventilation is a very important factor influencing the indoor concentrations of air contaminants, as it is the primary removal mechanism of all indoor air generated contaminants. Lower outdoor air exchange rates cause indoor generated air contaminants to accumulate to higher indoor air concentrations. Many homeowners rarely open their windows or doors for ventilation as a result of their concerns for security/safety, noise, dust, and odor concerns (Price, 2007). In the CNHS field study, 32% of the homes did not use their windows during the 24-hour Test Day, and 15% of the homes did not use their windows during the entire preceding week. Most of the homes with no window usage were homes in the winter field session. Thus, a substantial percentage of homeowners never open their windows, especially in the winter season. The median 24-hour measurement was 0.26 air changes per hour (ach), with a range of 0.09 ach to 5.3 ach. A total of 67% of the homes had outdoor air exchange rates below the minimum California Building Code (2001) requirement of 0.35 ach. Thus, the relatively tight envelope construction, combined with the fact that many people never open their windows for ventilation, results in homes with low outdoor air exchange rates and higher indoor air contaminant concentrations.

2-9 Cont.

The Pacific Coast Commons Project is close to roads with moderate to high traffic (e.g., Pacific Coast Highway, E. Mariposa Avenue, E. Holly Avenue, Indiana Street, etc.) as well as air traffic from Los Angeles International Airport, and thus the Project site is a sound impacted site.

According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), The future plus project traffic noise levels reported in Table 4.10-6 range from 55.4 dBA to 70.2 dBA CNEL.

As a result of the anticipated high outdoor noise levels, the current project will require a mechanical supply of outdoor air ventilation to allow for a habitable interior environment with closed windows and doors. Such a ventilation system would allow windows and doors to be kept closed at the occupant's discretion to control exterior noise within building interiors.

$PM_{2.5}$ Outdoor Concentrations Impact. An additional impact of the nearby motor vehicle traffic associated with this project, are the outdoor concentrations of $PM_{2.5}$. According to the Pacific Coast Commons Specific Plan - Draft Environmental Impact Report (Dudek, 2021), the Project is located in the South Coast Air Basin, which is a State and Federal non-attainment area for $PM_{2.5}$.

An air quality analyses should to be conducted to determine the concentrations of $PM_{2.5}$ in the outdoor and indoor air that people inhale each day. This air quality analyses needs to consider the cumulative impacts of the project related emissions, existing and projected future emissions from local $PM_{2.5}$ sources (e.g. stationary sources, motor vehicles, and airport traffic) upon the outdoor air concentrations at the Project site. If the outdoor concentrations are determined to exceed the California and National annual average $PM_{2.5}$ exceedence concentration of 12 $\mu g/m^3$, or the National 24-hour average exceedence concentration of 35 $\mu g/m^3$, then the buildings need to have a mechanical supply of outdoor air that has air filtration with sufficient removal efficiency, such that the indoor concentrations of outdoor $PM_{2.5}$ particles is less than the California and National $PM_{2.5}$ annual and 24-hour standards.

It is my experience that based on the projected high traffic noise levels, the annual average concentration of $PM_{2.5}$ will exceed the California and National $PM_{2.5}$ annual and 24-hour

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standards and warrant installation of high efficiency air filters (i.e. MERV 13 or higher) in all mechanically supplied outdoor air ventilation systems.

Indoor Air Quality Impact Mitigation Measures

The following are recommended mitigation measures to minimize the impacts upon indoor quality:

Indoor Formaldehyde Concentrations Mitigation. Use only composite wood materials (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins (CARB, 2009). CARB Phase 2 certified composite wood products, or ultra-low emitting formaldehyde (ULEF) resins, do not insure indoor formaldehyde concentrations that are below the CEQA cancer risk of 10 per million. Only composite wood products manufactured with CARB approved no-added formaldehyde (NAF) resins, such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

Alternatively, conduct the previously described Pre-Construction Building Material/Furnishing Chemical Emissions Assessment, to determine that the combination of formaldehyde emissions from building materials and furnishings do not create indoor formaldehyde concentrations that exceed the CEQA cancer and non-cancer health risks.

It is important to note that we are not asking that the builder "speculate" on what and how much composite materials be used, but rather at the design stage to select composite wood materials based on the formaldehyde emission rates that manufacturers routinely conduct using the California Department of Health "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers", (CDPH, 2017), and use the procedure described above (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

2-9 Cont.

Outdoor Air Ventilation Mitigation. Provide each habitable room with a continuous mechanical supply of outdoor air that meets or exceeds the California 2016 Building Energy Efficiency Standards (California Energy Commission, 2015) requirements of the greater of 15 cfm/occupant or 0.15 cfm/ft^2 of floor area. Following installation of the system conduct testing and balancing to insure that required amount of outdoor air is entering each habitable room and provide a written report documenting the outdoor airflow rates. Do not use exhaust only mechanical outdoor air systems, use only balanced outdoor air supply and exhaust systems or outdoor air supply only systems. Provide a manual for the occupants or maintenance personnel, that describes the purpose of the mechanical outdoor air system and the operation and maintenance requirements of the system.

$PM_{2.5}$ Outdoor Air Concentration Mitigation. Install air filtration with sufficient $PM_{2.5}$ removal efficiency (e.g. MERV 13 or higher) to filter the outdoor air entering the mechanical outdoor air supply systems, such that the indoor concentrations of outdoor $PM_{2.5}$ particles are less than the California and National $PM_{2.5}$ annual and 24-hour standards. Install the air filters in the system such that they are accessible for replacement by the occupants or maintenance personnel. Include in the mechanical outdoor air ventilation system manual instructions on how to replace the air filters and the estimated frequency of replacement.

2-9 Cont.

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Singer, B.C, Chan, W.R, Kim, Y., Offermann, F.J., and Walker I.S. 2020. Indoor Air Quality in California Homes with Code-Required Mechanical Ventilation. Indoor Air, Vol 30, Issue 5, 885-899.

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APPENDIX A

INDOOR FORMALDEHYDE CONCENTRATIONS
AND THE
CARB FORMALDEHYDE ATCM

With respect to formaldehyde emissions from composite wood products, the CARB ATCM regulations of formaldehyde emissions from composite wood products, do not assure healthful indoor air quality. The following is the stated purpose of the CARB ATCM regulation - *The purpose of this airborne toxic control measure is to "reduce formaldehyde emissions from composite wood products, and finished goods that contain composite wood products, that are sold, offered for sale, supplied, used, or manufactured for sale in California"*. In other words, the CARB ATCM regulations do not "assure healthful indoor air quality", but rather "reduce formaldehyde emissions from composite wood products".

Just how much protection do the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products? Definitely some, but certainly the regulations do not "*assure healthful indoor air quality*" when CARB Phase 2 products are utilized. As shown in the Chan 2019 study of new California homes, the median indoor formaldehyde concentration was of 22.4 $\mu g/m^3$ (18.2 ppb), which corresponds to a cancer risk of 112 per million for occupants with continuous exposure, which is more than 11 times the CEQA cancer risk of 10 per million.

Another way of looking at how much protection the CARB ATCM regulations provide building occupants from the formaldehyde emissions generated by composite wood products is to calculate the maximum number of square feet of composite wood product that can be in a residence without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy.

For this calculation I utilized the floor area (2,272 ft^2), the ceiling height (8.5 ft), and the number of bedrooms (4) as defined in Appendix B (New Single-Family Residence Scenario) of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions for Indoor Sources Using Environmental Chambers, Version 1.1, 2017, California Department of Public Health,

17 of 19

2-9
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Richmond, CA. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx.

For the outdoor air ventilation rate I used the 2019 Title 24 code required mechanical ventilation rate (ASHRAE 62.2) of 106 cfm (180 m^3/h) calculated for this model residence. For the composite wood formaldehyde emission rates I used the CARB ATCM Phase 2 rates.

The calculated maximum number of square feet of composite wood product that can be in a residence, without exceeding the CEQA cancer risk of 10 per million for occupants with continuous occupancy are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 15 ft^2 (0.7% of the floor area), or
Particle Board – 30 ft^2 (1.3% of the floor area), or
Hardwood Plywood – 54 ft^2 (2.4% of the floor area), or
Thin MDF – 46 ft^2 (2.0 % of the floor area).

For offices and hotels the calculated maximum amount of composite wood product (% of floor area) that can be used without exceeding the CEQA cancer risk of 10 per million for occupants, assuming 8 hours/day occupancy, and the California Mechanical Code minimum outdoor air ventilation rates are as follows for the different types of regulated composite wood products.

Medium Density Fiberboard (MDF) – 3.6 % (offices) and 4.6% (hotel rooms), or
Particle Board – 7.2 % (offices) and 9.4% (hotel rooms), or
Hardwood Plywood – 13 % (offices) and 17% (hotel rooms), or
Thin MDF – 11 % (offices) and 14 % (hotel rooms)

Clearly the CARB ATCM does not regulate the formaldehyde emissions from composite wood products such that the potentially large areas of these products, such as for flooring, baseboards, interior doors, window and door trims, and kitchen and bathroom cabinetry, could be used without causing indoor formaldehyde concentrations that result in CEQA

2-9 Cont.

cancer risks that substantially exceed 10 per million for occupants with continuous occupancy.

Even composite wood products manufactured with CARB certified ultra low emitting formaldehyde (ULEF) resins do not insure that the indoor air will have concentrations of formaldehyde the meet the OEHHA cancer risks that substantially exceed 10 per million. The permissible emission rates for ULEF composite wood products are only 11-15% lower than the CARB Phase 2 emission rates. Only use of composite wood products made with no-added formaldehyde resins (NAF), such as resins made from soy, polyvinyl acetate, or methylene diisocyanate can insure that the OEHHA cancer risk of 10 per million is met.

If CARB Phase 2 compliant or ULEF composite wood products are utilized in construction, then the resulting indoor formaldehyde concentrations should be determined in the design phase using the specific amounts of each type of composite wood product, the specific formaldehyde emission rates, and the volume and outdoor air ventilation rates of the indoor spaces, and all feasible mitigation measures employed to reduce this impact (e.g. use less formaldehyde containing composite wood products and/or incorporate mechanical systems capable of higher outdoor air ventilation rates). See the procedure described earlier (i.e. Pre-Construction Building Material/Furnishing Formaldehyde Emissions Assessment) to insure that the materials selected achieve acceptable cancer risks from material off gassing of formaldehyde.

Alternatively, and perhaps a simpler approach, is to use only composite wood products (e.g. hardwood plywood, medium density fiberboard, particleboard) for all interior finish systems that are made with CARB approved no-added formaldehyde (NAF) resins.

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Education

M.S. Mechanical Engineering (1985)
Stanford University, Stanford, CA.

Graduate Studies in Air Pollution Monitoring and Control (1980)
University of California, Berkeley, CA.

B.S. in Mechanical Engineering (1976)
Rensselaer Polytechnic Institute, Troy, N.Y.

Professional Experience

President: Indoor Environmental Engineering, San Francisco, CA. December, 1981 - present.

Direct team of environmental scientists, chemists, and mechanical engineers in conducting State and Federal research regarding indoor air quality instrumentation development, building air quality field studies, ventilation and air cleaning performance measurements, and chemical emission rate testing.

Provide design side input to architects regarding selection of building materials and ventilation system components to ensure a high quality indoor environment.

Direct Indoor Air Quality Consulting Team for the winning design proposal for the new State of Washington Ecology Department building.

Develop a full-scale ventilation test facility for measuring the performance of air diffusers: ASHRAE 129, Air Change Effectiveness, and ASHRAE 113, Air Diffusion Performance Index.

Develop a chemical emission rate testing laboratory for measuring the chemical emissions from building materials, furnishings, and equipment.

Principle Investigator of the California New Homes Study (2005-2007). Measured ventilation and indoor air quality in 108 new single family detached homes in northern and southern California.

Develop and teach IAQ professional development workshops to building owners, managers, hygienists, and engineers.

2-10

Air Pollution Engineer: Earth Metrics Inc., Burlingame, CA, October, 1985 to March, 1987.

Responsible for development of an air pollution laboratory including installation a forced choice olfactometer, tracer gas electron capture chromatograph, and associated calibration facilities. Field team leader for studies of fugitive odor emissions from sewage treatment plants, entrainment of fume hood exhausts into computer chip fabrication rooms, and indoor air quality investigations.

Staff Scientist: Building Ventilation and Indoor Air Quality Program, Energy and Environment Division, Lawrence Berkeley Laboratory, Berkeley, CA. January, 1980 to August, 1984.

Deputy project leader for the Control Techniques group; responsible for laboratory and field studies aimed at evaluating the performance of indoor air pollutant control strategies (i.e. ventilation, filtration, precipitation, absorption, adsorption, and source control).

Coordinated field and laboratory studies of air-to-air heat exchangers including evaluation of thermal performance, ventilation efficiency, cross-stream contaminant transfer, and the effects of freezing/defrosting.

Developed an *in situ* test protocol for evaluating the performance of air cleaning systems and introduced the concept of effective cleaning rate (ECR) also known as the Clean Air Delivery Rate (CADR).

Coordinated laboratory studies of portable and ducted air cleaning systems and their effect on indoor concentrations of respirable particles and radon progeny.

Co-designed an automated instrument system for measuring residential ventilation rates and radon concentrations.

Designed hardware and software for a multi-channel automated data acquisition system used to evaluate the performance of air-to-air heat transfer equipment.

Assistant Chief Engineer: Alta Bates Hospital, Berkeley, CA, October, 1979 to January, 1980.

Responsible for energy management projects involving installation of power factor correction capacitors on large inductive electrical devices and installation of steam meters on physical plant steam lines. Member of Local 39, International Union of Operating Engineers.

Manufacturing Engineer: American Precision Industries, Buffalo, NY, October, 1977 to October, 1979.

2-10 Cont.

Responsible for reorganizing the manufacturing procedures regarding production of shell and tube heat exchangers. Designed customized automatic assembly, welding, and testing equipment. Designed a large paint spray booth. Prepared economic studies justifying new equipment purchases. Safety Director.

Project Engineer: Arcata Graphics, Buffalo, N.Y. June, 1976 to October, 1977.

Responsible for the design and installation of a bulk ink storage and distribution system and high speed automatic counting and marking equipment. Also coordinated material handling studies which led to the purchase and installation of new equipment.

PROFESSIONAL ORGANIZATION MEMBERSHIP

American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

- Chairman of SPC-145P, Standards Project Committee - Test Method for Assessing the Performance of Gas Phase Air Cleaning Equipment (1991-1992)
- Member SPC-129P, Standards Project Committee - Test Method for Ventilation Effectiveness (1986-97)
  - Member of Drafting Committee
- Member Environmental Health Committee (1992-1994, 1997-2001, 2007-2010)
  - Chairman of EHC Research Subcommittee
  - Member of Man Made Mineral Fiber Position Paper Subcommittee
  - Member of the IAQ Position Paper Committee
  - Member of the Legionella Position Paper Committee
  - Member of the Limiting Indoor Mold and Dampness in Buildings Position Paper Committee
- Member SSPC-62, Standing Standards Project Committee - Ventilation for Acceptable Indoor Air Quality (1992 to 2000)
  - Chairman of Source Control and Air Cleaning Subcommittee
- Chairman of TC-4.10, Indoor Environmental Modeling (1988-92)
  - Member of Research Subcommittee
- Chairman of TC-2.3, Gaseous Air Contaminants and Control Equipment (1989-92)
  - Member of Research Subcommittee

2-10 Cont.

American Society for Testing and Materials (ASTM)

- D-22 Sampling and Analysis of Atmospheres
  - Member of Indoor Air Quality Subcommittee
- E-06 Performance of Building Constructions

American Board of Industrial Hygiene (ABIH)

American Conference of Governmental Industrial Hygienists (ACGIH)

- Bioaerosols Committee (2007-2013)

American Industrial Hygiene Association (AIHA)

Cal-OSHA Indoor Air Quality Advisory Committee

International Society of Indoor Air Quality and Climate (ISIAQ)

- Co-Chairman of Task Force on HVAC Hygiene

U. S. Green Building Council (USGBC)
- Member of the IEQ Technical Advisory Group (2007-2009)
- Member of the IAQ Performance Testing Work Group (2010-2012)

Western Construction Consultants (WESTCON)

PROFESSIONAL CREDENTIALS

Licensed Professional Engineer - Mechanical Engineering

Certified Industrial Hygienist - American Board of Industrial Hygienists

SCIENTIFIC MEETINGS AND SYMPOSIA

Biological Contamination, Diagnosis, and Mitigation, Indoor Air'90, Toronto, Canada, August, 1990.

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Moisture and Mould, Indoor Air '99, Edinburgh, Scotland, August, 1999.

Ventilation Modeling and Simulation, Indoor Air '99, Edinburgh, Scotland, August, 1999.

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Co-Chair, Bioaerosols X- Exposures in Residences, Indoor Air 2002, Monterey, CA, July 2002.

Healthy Indoor Environments, Anaheim, CA, April 2003.

Chair, Environmental Tobacco Smoke in Multi-Family Homes, Indoor Air 2008, Copenhagen, Denmark, July 2008.

Co-Chair, ISIAQ Task Force Workshop; HVAC Hygiene, Indoor Air 2002, Monterey, CA, July 2002.

Chair, ETS in Multi-Family Housing: Exposures, Controls, and Legalities Forum, Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

Chair, Energy Conservation and IAQ in Residences Workshop, Indoor Air 2011, Austin, TX, June 6, 2011.

Chair, Electronic Cigarettes: Chemical Emissions and Exposures Colloquium, Indoor Air 2016, Ghent, Belgium, July 4, 2016.

SPECIAL CONSULTATION

Provide consultation to the American Home Appliance Manufacturers on the development of a standard for testing portable air cleaners, AHAM Standard AC-1.

Served as an expert witness and special consultant for the U.S. Federal Trade Commission regarding the performance claims found in advertisements of portable air cleaners and residential furnace filters.

Conducted a forensic investigation for a San Mateo, CA pro se defendant, regarding an alleged homicide where the victim was kidnapped in a steamer trunk. Determined the air exchange rate in the steamer trunk and how long the person could survive.

Conducted *in situ* measurement of human exposure to toluene fumes released during nailpolish application for a plaintiffs attorney pursuing a California Proposition 65 product labeling case. June, 1993.

Conducted a forensic *in situ* investigation for the Butte County, CA Sheriff's Department of the emissions of a portable heater used in the bedroom of two twin one year old girls who suffered simultaneous crib death.

Consult with OSHA on the 1995 proposed new regulation regarding indoor air quality and environmental tobacco smoke.

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Consult with EPA on the proposed Building Alliance program and with OSHA on the proposed new OSHA IAQ regulation.

Johnson Controls Audit/Certification Expert Review; Milwaukee, WI. May 28-29, 1997.

Winner of the nationally published 1999 Request for Proposals by the State of Washington to conduct a comprehensive indoor air quality investigation of the Washington State Department of Ecology building in Lacey, WA.

Selected by the State of California Attorney General's Office in August, 2000 to conduct a comprehensive indoor air quality investigation of the Tulare County Court House.

Lawrence Berkeley Laboratory IAQ Experts Workshop: "Cause and Prevention of Sick Building Problems in Offices: The Experience of Indoor Environmental Quality Investigators", Berkeley, California, May 26-27, 2004.

Provide consultation and chemical emission rate testing to the State of California Attorney General's Office in 2013-2015 regarding the chemical emissions from e-cigarettes.

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W.J.Fisk, K.M.Archer, R.E Chant, D. Hekmat, F.J.Offermann, and B.Pedersen, "Performance of Residential Air-to-Air Heat Exchangers During Operation with Freezing and Periodic Defrosts," *ASHRAE Annual Transactions*, *91-1B*, 1984.

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F.J.Offermann, "Ventilation Effectiveness and ADPI Measurements of a Forced Air Heating System," *ASHRAE Transactions* , Volume 94, Part 1, pp 694-704, 1988.

F.J.Offermann and D. Int-Hout "Ventilation Effectiveness Measurements of Three Supply/Return Air Configurations," *Environment International* , Volume 15, pp 585-592 1989.

F.J. Offermann, S.A. Loiselle, M.C. Quinlan, and M.S. Rogers, "A Study of Diesel Fume Entrainment in an Office Building," *IAQ '89*, The Human Equation: Health and Comfort, pp 179-183, ASHRAE, Atlanta, GA, 1989.

R.G.Sextro and F.J.Offermann, "Reduction of Residential Indoor Particle and Radon Progeny Concentrations with Ducted Air Cleaning Systems," submitted to *Indoor Air*, 1990.

S.A.Loiselle, A.T.Hodgson, and F.J.Offermann, "Development of An Indoor Air Sampler for Polycyclic Aromatic Compounds", *Indoor Air* , Vol 2, pp 191-210, 1991.

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S.B. Hayward, K.S. Liu, L.E. Alevantis, K. Shah, S. Loiselle, F.J. Offermann, Y.L. Chang, L. Webber, "Effectiveness of Ventilation and Other Controls in Reducing Exposure to ETS in Office Buildings," Indoor Air '93, Helsinki, Finland, July 4-8, 1993.

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15

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16

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"Environmental Engineer: What Is It?", Monte Vista High School Career Day; April 10, 1997.

"Indoor Environment Controls: What's Hot and What's Not", Shaklee Corporation; San Francisco, CA, July 15, 1997.

"Measurement of Ventilation System Performance Parameters in the US EPA BASE Study", Healthy Buildings/IAQ'97, Washington, DC, September 29, 1997.

"Operations and Maintenance for Healthy and Comfortable Indoor Environments", PASMA; October 7, 1997.

"Designing for Healthy and Comfortable Indoor Environments", Construction Specification Institute, Santa Rosa, CA, November 6, 1997.

"Ventilation System Design for Good IAQ", University of Tulsa 10th Annual Conference, San Francisco, CA, February 25, 1998.

"The Building Shell", Tools For Building Green Conference and Trade Show, Alameda County Waste Management Authority and Recycling Board, Oakland, CA, February 28, 1998.

"Identifying Fungal Contamination Problems In Buildings", The City of Oakland Municipal Employees, Oakland, CA, March 26, 1998.

"Managing Indoor Air Quality in Schools: Staying Out of Trouble", CASBO, Sacramento, CA, April 20, 1998.

"Indoor Air Quality", CSOOC Spring Conference, Visalia, CA, April 30, 1998.

"Particulate and Gas Phase Air Filtration", ACGIH/OSHA, Ft. Mitchell, KY, June 1998.

2-10 Cont.

"Building Air Quality Facts and Myths", The City of Oakland / Alameda County Safety Seminar, Oakland, CA, June 12, 1998.

"Building Engineering and Moisture", Building Contamination Workshop, University of California Berkeley, Continuing Education in Engineering and Environmental Management, San Francisco, CA, October 21-22, 1999.

"Identifying and Mitigating Mold Contamination in Buildings", Western Construction Consultants Association, Oakland, CA, March 15, 2000; AIG Construction Defect Seminar, Walnut Creek, CA, May 2, 2001; City of Oakland Public Works Agency, Oakland, CA, July 24, 2001; Executive Council of Homeowners, Alamo, CA, August 3, 2001.

"Using the EPA BASE Study for IAQ Investigation / Communication", Joint Professional Symposium 2000, American Industrial Hygiene Association, Orange County & Southern California Sections, Long Beach, October 19, 2000.

"Ventilation," Indoor Air Quality: Risk Reduction in the 21st Century Symposium, sponsored by the California Environmental Protection Agency/Air Resources Board, Sacramento, CA, May 3-4, 2000.

"Workshop 18: Criteria for Cleaning of Air Handling Systems", Healthy Buildings 2000, Espoo, Finland, August 2000.

"Closing Session Summary: 'Building Investigations' and 'Building Design & Construction', Healthy Buildings 2000, Espoo, Finland, August 2000.

"Managing Building Air Quality and Energy Efficiency, Meeting the Standard of Care", BOMA, MidAtlantic Environmental Hygiene Resource Center, Seattle, WA, May 23rd, 2000; San Antonio, TX, September 26-27, 2000.

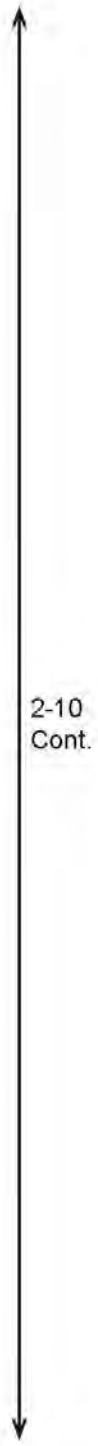
"Diagnostics & Mitigation in Sick Buildings: When Good Buildings Go Bad," University of California Berkeley, September 18, 2001.

"Mold Contamination: Recognition and What To Do and Not Do", Redwood Empire Remodelers Association; Santa Rosa, CA, April 16, 2002.

"Investigative Tools of the IAQ Trade", Healthy Indoor Environments 2002; Austin, TX; April 22, 2002.

"Finding Hidden Mold: Case Studies in IAQ Investigations", AIHA Northern California Professionals Symposium; Oakland, CA, May 8, 2002.

"Assessing and Mitigating Fungal Contamination in Buildings", Cal/OSHA Training; Oakland, CA, February 14, 2003 and West Covina, CA, February 20-21, 2003.



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"Use of External Containments During Fungal Mitigation", Invited Speaker, ACGIH Mold Remediation Symposium, Orlando, FL, November 3-5, 2003.

Building Operator Certification (BOC), 106-IAQ Training Workshops, Northwest Energy Efficiency Council; Stockton, CA, December 3, 2003; San Francisco, CA, December 9, 2003; Irvine, CA, January 13, 2004; San Diego, January 14, 2004; Irwindale, CA, January 27, 2004; Downey, CA, January 28, 2004; Santa Monica, CA, March 16, 2004; Ontario, CA, March 17, 2004; Ontario, CA, November 9, 2004, San Diego, CA, November 10, 2004; San Francisco, CA, November 17, 2004; San Jose, CA, November 18, 2004; Sacramento, CA, March 15, 2005.

"Mold Remediation: The National QUEST for Uniformity Symposium", Invited Speaker, Orlando, Florida, November 3-5, 2003.

"Mold and Moisture Control", Indoor Air Quality workshop for The Collaborative for High Performance Schools (CHPS), San Francisco, December 11, 2003.

"Advanced Perspectives In Mold Prevention & Control Symposium", Invited Speaker, Las Vegas, Nevada, November 7-9, 2004.

"Building Sciences: Understanding and Controlling Moisture in Buildings", American Industrial Hygiene Association, San Francisco, CA, February 14-16, 2005.

"Indoor Air Quality Diagnostics and Healthy Building Design", University of California Berkeley, Berkeley, CA, March 2, 2005.

"Improving IAQ = Reduced Tenant Complaints", Northern California Facilities Exposition, Santa Clara, CA, September 27, 2007.

"Defining Safe Building Air", Criteria for Safe Air and Water in Buildings, ASHRAE Winter Meeting, Chicago, IL, January 27, 2008.

"Update on USGBC LEED and Air Filtration", Invited Speaker, NAFA 2008 Convention, San Francisco, CA, September 19, 2008.

"Ventilation and Indoor air Quality in New California Homes", National Center of Healthy Housing, October 20, 2008.

"Indoor Air Quality in New Homes", California Energy and Air Quality Conference, October 29, 2008.

"Mechanical Outdoor air Ventilation Systems and IAQ in New Homes", ACI Home Performance Conference, Kansas City, MO, April 29, 2009.

"Ventilation and IAQ in New Homes with and without Mechanical Outdoor Air Systems", Healthy Buildings 2009, Syracuse, CA, September 14, 2009.

19

2-10 Cont.

"Ten Ways to Improve Your Air Quality", Northern California Facilities Exposition, Santa Clara, CA, September 30, 2009.

"New Developments in Ventilation and Indoor Air Quality in Residential Buildings", Westcon meeting, Alameda, CA, March 17, 2010.

"Intermittent Residential Mechanical Outdoor Air Ventilation Systems and IAQ", ASHRAE SSPC 62.2 Meeting, Austin, TX, April 19, 2010.

"Measured IAQ in Homes", ACI Home Performance Conference, Austin, TX, April 21, 2010.

"Respiration: IEQ and Ventilation", AIHce 2010, How IH Can LEED in Green buildings, Denver, CO, May 23, 2010.

"IAQ Considerations for Net Zero Energy Buildings (NZEB)", Northern California Facilities Exposition, Santa Clara, CA, September 22, 2010.

"Energy Conservation and Health in Buildings", Berkeley High SchoolGreen Career Week, Berkeley, CA, April 12, 2011.

"What Pollutants are Really There ?", ACI Home Performance Conference, San Francisco, CA, March 30, 2011.

"Energy Conservation and Health in Residences Workshop", Indoor Air 2011, Austin, TX, June 6, 2011.

"Assessing IAQ and Improving Health in Residences", US EPA Weatherization Plus Health, September 7, 2011.

"Ventilation: What a Long Strange Trip It's Been", Westcon, May 21, 2014.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposures", Indoor Air 2014, Hong Kong, July, 2014.

"Infectious Disease Aerosol Exposures With and Without Surge Control Ventilation System Modifications", Indoor Air 2014, Hong Kong, July, 2014.

"Chemical Emissions from E-Cigarettes", IMF Health and Welfare Fair, Washington, DC, February 18, 2015.

"Chemical Emissions and Health Hazards Associated with E-Cigarettes", Roswell Park Cancer Institute, Buffalo, NY, August 15, 2014.

"Formaldehyde Indoor Concentrations, Material Emission Rates, and the CARB ATCM", Harris Martin's Lumber Liquidators Flooring Litigation Conference, WQ Minneapolis Hotel, May 27, 2015.

2-10 Cont.

"Chemical Emissions from E-Cigarettes: Direct and Indirect Passive Exposure", FDA Public Workshop: Electronic Cigarettes and the Public Health, Hyattsville, MD June 2, 2015.

"Creating Healthy Homes, Schools, and Workplaces", Chautauqua Institution, Athenaeum Hotel, August 24, 2015.

"Diagnosing IAQ Problems and Designing Healthy Buildings", University of California Berkeley, Berkeley, CA, October 6, 2015.

"Diagnosing Ventilation and IAQ Problems in Commercial Buildings", BEST Center Annual Institute, Lawrence Berkeley National Laboratory, January 6, 2016.

"A Review of Studies of Ventilation and Indoor Air Quality in New Homes and Impacts of Environmental Factors on Formaldehyde Emission Rates From Composite Wood Products", AIHce2016, May, 21-26, 2016.

"Admissibility of Scientific Testimony", Science in the Court, Proposition 65 Clearinghouse Annual Conference, Oakland, CA, September 15, 2016.

"Indoor Air Quality and Ventilation", ASHRAE Redwood Empire, Napa, CA, December 1, 2016.

2-10 Cont.

EXHIBIT B

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VIA E-MAIL

April 12, 2021

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: Pacific Coast Commons Specific Plan Project

Dear Mr. Samaras,

On behalf of the Southwest Regional Council of Carpenters ("**Commenter**" or "**Carpenter**"), my Office is submitting these comments on the City of El Segundo's ("**City**" or "**Lead Agency**") Draft Environmental Impact Report ("**DEIR**") (SCH No. 2020050508) for the Pacific Coast Commons Specific Plan Project which would demolish existing structures, including a former restaurant with meeting/ballroom space, a rental car tenant, and the existing surface parking lots of the Fairfield Inn & Suites by Marriott and Aloft Hotel properties, and would allow for the development of up to 263 new housing units and approximately 11,250 gross square feet of new commercial/retail uses, and associated parking. ("**Project**").

2-11

The Southwest Carpenters is a labor union representing 50,000 union carpenters in six states and has a strong interest in well ordered land use planning and addressing the environmental impacts of development projects.

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

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

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

Commenters incorporates by reference all comments raising issues regarding the EIR submitted prior to certification of the EIR for the Project. *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, Commenter requests that the Lead Agency provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**"), Cal Public Resources Code ("**PRC**") § 21000 *et seq*, and the California Planning and Zoning Law ("**Planning and Zoning Law**"), Cal. Gov't Code §§ 65000–65010. California Public Resources Code Sections 21092.2, and 21167(f) and 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.

2-11 Cont.

The City should require the Applicant provide additional community benefits such as requiring local hire and use of a skilled and trained workforce to build the Project. The City should require the use of workers who have graduated from a Joint Labor Management apprenticeship training program approved by the State of California, or have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state approved apprenticeship training program or who are registered apprentices in an apprenticeship training program approved by the State of California.

Community benefits such as local hire and skilled and trained workforce requirements 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 providing localized economic benefits. 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 providing localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

> [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.

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

> . . . labor 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]

2-11 Cont.

The City should also require the Project to be built to standards exceeding the current 2019 California Green Building Code to mitigate the Project's environmental impacts and to advance progress towards the State of California's environmental goals.

I. EXPERTS

This comment letter includes comments from air quality and greenhouse gas experts Matt Hagemann, P.G., C.Hg. and Paul Rosenfeld, Ph.D. concerning the DEIR. Their comments, attachments, and Curriculum Vitae ("CV") are attached hereto and are incorporated herein by reference.

Matt Hagemann, P.G., C.Hg. ("Mr. Hagemann") has over 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA

[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

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, Mr. Hagemann also served as Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closer. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring.

For the past 15 years, Mr. Hagemann has worked as a founding partner with SWAPE (Soil/Water/Air Protection Enterprise). At SWAPE, Mr. Hagemann has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality, and greenhouse gas emissions.

Mr. Hagemann has a Bachelor of Arts degree in geology from Humboldt State University in California and a Masters in Science degree from California State University Los Angeles in California.

Paul Rosenfeld, Ph.D. ("Dr. Rosenfeld") is a principal environmental chemist at SWAPE. Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts on human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risks, 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, particular 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

2-11 Cont.

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.

Dr. Rosenfeld has a Ph.D. in soil chemistry from the University of Washington, M.S. in environmental science from U.C. Berkeley, and B.A. in environmental studies from U.C. Santa Barbara.

II. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

A. Background Concerning the California Environmental Quality Act

CEQA has two basic purposes. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental effects of a project. 14 California Code of Regulations ("**CCR**" or "**CEQA Guidelines**") § 15002(a)(1).[2] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made. Thus, the EIR 'protects not only the environment but also informed self-government.' [Citation.]" *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564. 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.

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring alternatives or mitigation measures. CEQA Guidelines § 15002(a)(2) and (3). *See also, Berkeley Jets,* 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta*

2-11 Cont.

[2] 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. (Cal. 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. Department of Fish & Wildlife* (2015) 62 Cal. 4th 204, 217.

Valley v. Board of Supervisors (1990) 52 Cal.3d 553; *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1988) 47 Cal. 3d 376, 400. The 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(a)(2). 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 CEQA section 21081. CEQA Guidelines § 15092(b)(2)(A–B).

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.' A 'clearly inadequate or unsupported study is entitled to no judicial deference.'" *Berkeley Jets*, 91 Cal.App.4th 1344, 1355 (emphasis added) (quoting *Laurel Heights*, 47 Cal.3d at 391, 409 fn. 12). 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. Cnty. 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 court stated in *Berkeley Jets*, 91 Cal. App. 4th at 1355:

> A 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.

The preparation and circulation of an EIR is more than a set of technical hurdles for agencies and developers to overcome. 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. 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. *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).

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B. CEQA Requires Revision and Recirculation of an Environmental Impact Report When Substantial Changes or New Information Comes to Light

Section 21092.1 of the California Public Resources Code requires that "[w]hen significant new information is added to an environmental impact report after notice has been given pursuant to Section 21092 … but prior to certification, the public agency shall give notice again pursuant to Section 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in order to give the public a chance to review and comment upon the information. CEQA Guidelines § 15088.5.

Significant new information includes "changes in the project or environmental setting as well as additional data or other information" 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)." CEQA Guidelines § 15088.5(a). Examples of significant new information requiring recirculation include "new significant environmental impacts from the project or from a new mitigation measure," "substantial increase in the severity of an environmental impact," "feasible project alternative or mitigation measure considerably different from others previously analyzed" as well as when "the draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded." *Id.*

An agency has an obligation to recirculate an environmental impact report for public notice and comment due to "significant new information" regardless of whether the agency opts to include it in a project's environmental impact report. *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 95 [finding that in light of a new expert report disclosing potentially significant impacts to groundwater supply "the EIR should have been revised and recirculated for purposes of informing the public and governmental agencies of the volume of groundwater at risk and to allow the public and governmental agencies to respond to such information."]. If significant new information was brought to the attention of an agency prior to certification, an agency is required to revise and recirculate that information as part of the environmental impact report.

2-11 Cont.

C. Due to the COVID-19 Crisis, the City Must Adopt a Mandatory Finding of Significance that the Project May Cause a Substantial Adverse Effect on Human Beings and Mitigate COVID-19 Impacts

CEQA requires that an agency make a finding of significance when a Project may cause a significant adverse effect on human beings. PRC § 21083(b)(3); CEQA Guidelines § 15065(a)(4).

Public health risks related to construction work requires a mandatory finding of significance under CEQA. 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.[3]

SWRCC recommends that the Lead Agency adopt additional CEQA mitigation measures to mitigate public health risks from the Project's construction activities. SWRCC requests that the Lead Agency 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 SWRCC's experience with safe construction site work practices, SWRCC recommends that the Lead Agency 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.

2-11 Cont.

[3] 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.

- 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.[4]

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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 Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

D. The DEIR's Mitigation Measures are Impermissibly Vague and Defer Critical Details

The DEIR improperly defers critical details of mitigation measures. Feasible mitigation measures for significant environmental effects must be set forth in an EIR for

[4] *See also* The Center for Construction Research and Training, North America's Building Trades Unions (April 27 2020) NABTU and CPWR COVIC-19 Standards for U.S Constructions 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.

consideration by the lead agency's decision makers and the public before certification of the EIR and approval of a project. The formulation of mitigation measures generally cannot be deferred until after certification of the EIR and approval of a project. CEQA Guidelines § 15126.4(a)(1)(B) ("…[f]ormulation of mitigation measures should not be deferred until some future time.").

Deferring critical details of mitigation measures undermines CEQA's purpose as a public information and decision-making statute. "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4th 70, 92 ("*Communities*"). As the Court noted in *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307, "[a] study conducted after approval of a project will inevitably have a diminished influence on decision-making. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA."

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A lead agency's adoption of an EIR's proposed mitigation measure for a significant environmental effect that merely states a "generalized goal" to mitigate a significant effect without committing to any specific criteria or standard of performance violates CEQA by improperly deferring the formulation and adoption of enforceable mitigation measures. *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 670; *Communities*, 184 Cal.App.4th at 93 ("EIR merely proposes a generalized goal of no net increase in greenhouse gas emissions and then sets out a handful of cursorily described mitigation measures for future consideration that might serve to mitigate the [project's significant environmental effects."); cf. *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029 (upheld EIR that set forth a range of mitigation measures to offset significant traffic impacts where performance criteria would have to be met, even though further study was needed and EIR did not specify which measures had to be adopted by city).].

The following Project mitigation measures are impermissibly vague and defer critical details:

- MM-CUL-1: Calls for development, but does not include details, of a Worker Environmental

Awareness Program (WEAP) in order to address impacts to archeological resources;

- MM-GEO-1: Calls for a paleontologist to prepare a Paleontolgoical Resources Impact Mitigation Program (PRIMP) to mitigate unique paleontological resources but does not include any details of the PRIMP for review;
- MM-HAZ-1: Calls for incorporation of "abatement procedures" to remove asbestos, lead, etc. but does not include any specific performance standards for removal and does not include any plan in the DEIR for review; and
- MM-HAZ-2: Calls for development of a Hazardous Materials Contingency Plan (HMCP) to address potential impacts relating to soil and vapor intrusion with the 76 gas station adjacent to PCC-North, but again, fails to include any plan or any performance standards by which soil vapor would be mitigated to less than significant levels.

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(DEIR, ES-10~16.)

E. The DEIR Fails to Support Its Findings with Substantial Evidence

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 EIR 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* (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).

2-11 Cont.

1. *The DEIR Fails to Support its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

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).

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 CAPs 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;

(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;

2-11 Cont.

Collectively, the above-listed CAP 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.

Here, the DEIR's analysis of greenhouse gas emissions impacts is not supported by substantial evidence for all of the reasons outlined in SWAPE's April 12, 2021 letter regarding their review of the DEIR[5]:

- The DEIR utilized an incorrect and unsubstantiated quantitative analysis of emissions;
- The DEIR incorrectly relied upon an outdated quantitative GHG threshold;

[5] April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on Pacific Coast Commons Specific Plan Project. Attached hereto as Exhibit D.

- The DEIR failed to identify a potentially significant GHG impact; and
- The DEIR failed to consider performance-based standards under CARB's 2017 Scoping Plan, and failed to consider performance-based standards under SCAG's RTP/SCS plan.

(Exhibit D, 20-27.)

Additionally, the DEIR needs to consider and incorporate all of the feasible mitigation measures to reduce identified GHG impacts proposed by SWAPE. (Exhibit D, 27-34.)

2. *The DEIR Fails to Support its Findings on Air Quality Impacts with Substantial Evidence.*

Second, the DEIR's Air Quality analysis is fundamentally flawed and not supported by substantial evidence for all the reasons outlined in SWAPE's comments, including:

- Use of unsubstantiated input parameters to estimate project emissions,
  - Underestimated land use sizes;
  - Failure to model all required demolition;
  - Unsubstantiated changed to acres of grading values;
  - Unsubstantiated changes to material silt content values;
  - Unsubstantiated change to hauling trip numbers;
  - Unsubstantiated changes to architectural and area coating areas;
  - Underestimated operational vehicle trip rates;
  - Unsubstantiated changes to energy use values;
  - Unsubstantiated changes to wastewater treatment system percentages;
  - Incorrect application of construction-related mitigation measures;
  - Incorrect application of mobile-related operational mitigation measures; and
  - Failing to adequately analyze diesel particulate matter health risk emissions and identify a potentially significant health risk impact.

(Exhibit D, 1-19.)

Additionally, as noted above, the DEIR fails to consider or include many feasible mitigation measures proposed by SWAPE to reduce significant air quality impacts.

2-11 Cont.

(DEIR, 27-34.) The DEIR needs to be revised and recirculated with a substantiated air quality analysis that includes all feasible mitigation measures to reduce impacts.

3. *The DEIR Fails to Support its Findings on Transportation Impacts with Substantial Evidence.*

CEQA Guidelines § 15064.3(b) requires analysis of a Project's vehicle miles traveled (VMT) impacts as part of the environmental document's transportation impacts analysis. According to the DEIR, the OPR technical guidance suggests that projects which have a VMT per capita of 15% or more below existing conditions may indicate a less than significant transportation impact relating to VMT. (DEIR, 4.13-21~2.) Assuming then this is the proper methodology, the DEIR concludes that the Project would have a less than significant VMT impact because the project is predicted to exhibit more than a 15% reduction in VMT over VMT per capita for the City as a whole, and the region. (DEIR, 4.13-22.)

The DEIR estimates a VMT per capita of 10.9 based upon the project site's location within TAZ (transportation analysis zone) 21125100—yet, it is not clear that this VMT estimate accounts for trips other than home-based VMT which is traced back to residences.[6] Home-based VMT excludes work trips and other trips not originating from residences in the Project area. Thus, the TAZ estimate is not an accurate reflection of actual (or total) VMT per capita for the TAZ cannot be relied upon to determine VMT impact significance. A home-based VMT analysis is even less supported in the case of a project that includes mixed-use development, as here, such as a hotel and retail uses where home-based VMT estimates will not accurately reflect total VMT.

2-11 Cont.

The DEIR should be revised and recirculated with a transportation analysis that includes total VMT estimates.

4. *The DEIR Fails to Support its Findings on Hazards and Hazardous Materials Impacts with Substantial Evidence.*

Appendix F of the DEIR (Phase I ESA) identifies numerous potentially hazardous waste sites in and around the Project site. Though some of these sites have received regulatory closure, the DEIR identifies at least one site "which could impact the

[6] *See, e.g., Transportation Analysis Updates in Santa Clarita* (May 19, 2020), prepared for City of Santa Clarita by Fehr & Peers, p. 15. Available at https://www.santa-clarita.com/Home/ShowDocument?id=18536.

Project site." (DEIR, 4.7-4.) The DEIR also identifies at least three other hazardous material release sites but postulates they would "not likely impact the environmental condition of the Project site. (*Id.*) Additionally, numerous UST violations were identified near the Project site; a gas station has been under ongoing operations since the 1930s which also includes environmental hazard violations for releases of petroleum products; and other multiple sources of PCE and TCE contamination were identified in the Project site area relating to manufacturing operations. (DEIR, 4.7-5.)

Despite all this evidence of potential hazardous substances release and a Phase I ESA of the site or area, the DEIR concludes that there would be no long-term operational impacts involving the release of hazardous materials. (DEIR, 4.7-21.) The City simply cannot rule out a risk to future Project site occupants from release of hazardous materials from all of these known sources without a Phase II ESA. The DEIR admits that ongoing operations of the former 76 gas station indicate a potential for release of hazardous substances, and many sources of PCE and TCE are present in the area that may require mitigation that have not been characterized at the site. This information does not support a conclusion of a less than significant impact without further studies. The DEIR should be revised and recirculated to include a Phase II ESA of the Project site that includes the surrounding area to adequately analyze whether there are potential impacts that may require mitigation.

2-11 Cont.

F. The Project Objectives are Unduly Narrow

Project objectives should not be so narrowly defined that they preclude consideration of reasonable alternatives for achieving the project's underlying purpose. *North Coast Rivers Alliance v Kawamura* (2015) 243 Cal. App. 4th 647, 668. Inconsistency with only some project objectives may not be an appropriate basis to eliminate impact-reducing project alternatives from analysis in an EIR. See CEQA Guidelines § 15126.6(c), (f). The fact that a proposed alternative does not meet all of the Project Objectives is not an appropriate basis to eliminate impact-reducing alternatives from analysis in an EIR. CEQA Guidelines § 15126.6(c), (f). Objectives should be based on the underlying purpose of the project, rather than the specific nature of the proposed project. *Habitat & Watershed Caretakers v City of Santa Cruz* (2013) 213 Cal. App. 4th 1277, 1299 (holding that the project objective of implementing a settlement agreement relating to expansion of a University of California campus was too narrow and too focused on the nature of the Project).

Here, the EIR provides extremely narrow and specific objectives that essentially only describe the proposed Project, rather than the purpose of the project:

- Objective 1 calls for maintaining existing hotel uses; and
- Objective 5 calls for increasing the efficient use of land by eliminating surface parking lots and providing parking garages that allow for sharing among hotel commercial, and residential land uses.

(DEIR, 3-18.)

Effectively, the above Project objectives so narrowly define the scope of the Project that it curtails any meaningful analysis or consideration of Project alternatives that could substantially reduce the Project's environmental impacts. A revised and recirculated DEIR should include amended Project objectives that do not circumscribe the EIR's Alternatives' analysis.

III. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

2-11 Cont.

A. Background Regarding the State Planning and Zoning Law

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 (See *DeVita v. County of Napa* (1995) 9 Cal. App. 4th 763, 773), and serves as a "constitution" or "charter" for all future development. *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal. App. 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." See *Debottari v. Norco City Council* (1985) 171 Cal. App. 3d 1204, 1213.

State law mandates two levels of consistency. First, a general plan must be internally or "horizontally" consistent: its elements must "comprise an integrated, internally consistent and compatible statement of policies for the adopting agency." (See Gov. Code § 65300.5; *Sierra Club v. Bd. of Supervisors* (1981) 126 Cal. App. 3d 698, 704.) A general plan amendment thus may not be internally inconsistent, nor may it cause the general plan as a whole to become internally inconsistent. See *DeVita*, 9 Cal. App. 4th at 796 fn. 12.

Second, state law requires "vertical" consistency, meaning that zoning ordinances and other land use decisions also must be consistent with the general plan. (See Gov. Code § 65860(a)(2) [land uses authorized by zoning ordinance must be "compatible with the objectives, policies, general land uses, and programs specified in the [general] plan."]; see also *Neighborhood Action Group v. County of Calaveras* (1984) 156 Cal. App. 3d 1176, 1184.) A zoning ordinance that conflicts with the general plan or impedes achievement of its policies is invalid and cannot be given effect. See *Lesher*, 52 Cal. App. 3d at 544.

State law requires that all subordinate land use decisions, including conditional use permits, be consistent with the general plan. See Gov. Code § 65860(a)(2); *Neighborhood Action Group*, 156 Cal. App. 3d at 1184.

A project cannot be found consistent with a general plan if it conflicts with a general plan policy that is "fundamental, mandatory, and clear," regardless of whether it is consistent with other general plan policies. See *Endangered Habitats League v. County of Orange* (2005) 131 Cal. App. 4th 777, 782-83; *Families Unafraid to Uphold Rural El Dorado County v. Bd. of Supervisors* (1998) 62 Cal. App. 4th 1332, 1341-42 ("*FUTURE*").

Moreover, even in the absence of such a direct conflict, an ordinance or development project may not be approved if it interferes with or frustrates the general plan's policies and objectives. See *Napa Citizens*, 91 Cal. App. 4th at 378-79; see also *Lesher*, 52 Cal. App. 3d at 544 (zoning ordinance restricting development conflicted with growth-oriented policies of general plan).

2-11 Cont.

B. The DEIR Fails to Demonstrate Consistency with SCAG's RTP/SCS Plan

Senate Bill No. 375 requires regional planning agencies to include a sustainable communities strategy in their regional transportation plans. Gov. Code § 65080, sub.(b)(2)(B).) CEQA Guidelines § 15125(d) provides that an EIR "shall discuss any inconsistencies between the proposed project and…regional plans. Such regional plans include…regional transportation plans." Thus, CEQA requires analysis of any inconsistencies between the Project and the relevant RTP/SCS plan.

In September 2008, SB 375 (Gov. Code § 65080(b) et seq.) was instituted to help achieve AB 32 goals through strategies including requiring regional agencies to prepare a Sustainable Communities Strategy ("SCS") to be incorporated into their Regional Transportation Plan ("RTP"). The RTP links land use planning with the regional

transportation system so that the region can grow smartly and sustainably, while also demonstrating how the region will meet targets set by CARB that reduce the per capita GHG emission from passenger vehicles in the region.

According to SWAPE's comments, the DEIR failed to consider performance-based standards under the RTP/SCS plan. The DEIR failed to evaluate whether the Project is consistent with per capita GHG emission targets, or daily vehicle miles traveled. (Ex. D, 24.) And according to SWAPE's analysis and conclusion, the Project exceeds both per capita GHG emissions targets and daily VMT per capita—thus, the Project is not consistent with SCAG's RTP/SCS Plan.

C. The DEIR Fails to Demonstrate Consistency with the State Housing Law's Regional Housing Needs Assessment Requirements and the City's Obligations to Fulfill those Requirements in its Housing Element

State law requires that jurisdictions provide their fair share of regional housing needs and adopt a general plan for future growth (California Government Code Section 65300). The California Department of Housing and Community Development (HCD) is mandated to determine state-wide housing needs by income category for each Council of Governments (COG) throughout the state. The housing need is determined based on four broad household income categories: very low (households making less than 50 percent of median family income), low (50 to 80 percent of median family income), moderate (80 to 120 percent of median family income), and above moderate (more than 120 percent of median family income). The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

2-11 Cont.

CEQA requires the DEIR analyze the Project's consistency with the State's housing goals. CEQA Guidelines section 15125(d) requires that an environmental impact report "discuss any inconsistencies between the proposed project and applicable general plans, specific plans and regional plans. *See also Golden Door Properties, LLC v. County of San Diego* (2020) 50 Cal. App. 5th 467, 543.

A Court "[w]hen reviewing whether a discussion is sufficient to satisfy CEQA, . . . the EIR (1) includes sufficient detail to enable those who did not participate in its preparation to understand and to consider meaningfully the issues the proposed project raises [citation omitted], and (2) makes a reasonable effort to substantively

connect a project's air quality impacts to likely health consequences." (*Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 510 [citing *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405.]; see also PRC §§ 21002.1(e), 21003(b).) The Court may determine whether a CEQA environmental document sufficiently discloses information required by CEQA de novo as "noncompliance with the information disclosure provisions" of CEQA is a failure to proceed in a manner required by law. (PRC § 21005(a); see also *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502, 515.)

SCAG is the COG for Los Angeles County and has determined that the City's RHNA for the 6th Cycle allocation period is 189 units for very low income residents, 88 units for low income residents, 84 units for moderate income residents, and 131 unit for above moderate income residents for a total of 492 housing units.[7]

First, the City fails to analyze consistency with the latest RHNA allocation in the DEIR. (DEIR, 4.11-6.) Second, the Project fails to include *any* affordable housing units as part of the Project for residents with income below above moderate. The City is required to meet the housing needs of all of city residents under the state housing law. While the DEIR calls for a provision in a future development agreement to include some affordable housing units, at this stage of the Project, none are included and no development agreement has been drafted.

2-11 Cont.

The DEIR should be revised and recirculated with an affordable housing component.

IV. CONCLUSION

Commenters request that the City deny the Project's proposed Site Plan Review and any other discretionary approvals the City finds necessary and order the revision and recirculation of the Project's environmental impact report to address the aforementioned concerns.

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[7] SCAG Regional Housing Needs Assessment Final Allocation, 6th Cycle Final RHNA Allocation Plan. Available at https://scag.ca.gov/rhna.

Please contact my Office if you have any questions or concerns.

Sincerely,

Mitchell M. Tsai

Attorneys for Southwest Regional
Council of Carpenters

Attached:

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);

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

April 12, 2021 SWAPE Letter to Greg Sonstein re Comments on the Pacific Coast Commons Specific Plan Project (Exhibit D).

2-11
Cont.

EXHIBIT A

SWAPE 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.

2-12

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.

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):

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

Where:

$\text{Emissions}_{pollutant}$ = 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.

2-12 Cont.

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.

2

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**

2-12 Cont.

[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.

3

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_2e)	3,623
Amortized Construction GHG Emissions (MT CO_2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized Construction GHG Emissions (MT CO_2e/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.

2-12 Cont.

[14] "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-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.

2-12 Cont.

EXHIBIT B

SWAPE 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.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

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.

2-13

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 H_2O 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.

Cheremisinoff, 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.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, 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.

2-13 Cont.

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., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofiller. *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.

2-13 Cont.

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). Perfluoroctanoic Acid (PFOA) and Perfluoroactane 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.

2-13 Cont.

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 Florala, 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.

2-13 Cont.

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.

2-13 Cont.

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.

2-13 Cont.

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

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 Agrosciences, 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
Warrn 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

2-13 Cont.

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

2-13 Cont.

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

2-13
Cont.

EXHIBIT C

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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

2-13 Cont.

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);

- 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.

2-13 Cont.

- 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.

2-13
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3

- 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.

2-13 Cont.

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.

2-13 Cont.

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.

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, Coloradao.

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.

6

2-13 Cont.

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 repesentatives, 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.

7

2-13
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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., Fukanaga, 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.

2-13 Cont.

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.

2-13 Cont.

EXHIBIT D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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April 12, 2021

Greg Sonstein, Esq.
Mitchell M. Tsai, Attorney at Law
155 South El Molino Avenue Suite 104
Pasadena, CA 91101

Subject: Comments on the Pacific Coast Commons Specific Plan (SCH No. 2020050508)

Dear Mr. Sonstein,

We have reviewed the February 2021 Draft Environmental Impact Report ("DEIR") for the Pacific Coast Commons Specific Plan ("Project") located in the City of El Segundo ("City"). The Project proposes to the adoption of a Specific Plan that would allow for the continued operation of 596 hotel rooms and construction of 263 housing units, 11,252-SF of commercial/retail uses, and 792 parking stalls on the 6.385-acre site.

2-14

Our review concludes that the DEIR fails to adequately evaluate the Project's air quality, health risk, and greenhouse gas impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An updated EIR should be prepared to adequately assess and mitigate the potential air quality, health risk, and greenhouse gas impacts that the project may have on the surrounding environment.

Air Quality

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 4.2-1).[1] 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

[1] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

be justified by substantial evidence. Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters are utilized in calculating the Project's air pollutant emissions and make known which default values are changed as well as provide justification for the values selected.

When reviewing the Project's CalEEMod output files, provided in Appendix C-1, "CalEEMod Outputs," and Appendix C-2, "Health Risk Assessment Report," to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, the Project's construction and operational emissions are underestimated. As a result, an updated EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Underestimated Land Use Sizes

According to the DEIR, the Project proposes to construct 327,021-SF of residential development, 11,252-SF of commercial/retail uses, and 792 parking spaces (p. 3-2). However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include only 314,659-SF of residential space, 11,000-SF of commercial/retail space, and 763 parking spaces (see excerpt below) (Appendix C-1, pp. 3, 51, 95; Appendix C-2, pp. 33).

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area
Enclosed Parking with Elevator	763.00	Space	0.00	305,200.00
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00
High Turnover (Sit Down Restaurant)	3.70	1000sqft	0.00	3,700.00
Apartments Mid Rise	263.00	Dwelling Unit	0.00	314,659.00
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00

2-14 Cont.

As you can see in the excerpt above, the proposed residential, commercial/retail, and parking land uses are underestimated by 12,362-SF, 252-SF, and 29 spaces, respectively. These underestimations present an issue, as the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[2] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Thus, by underestimating the sizes of the proposed residential, commercial/retail, and parking land uses, the models underestimate the Project's emissions and should not be relied upon to determine Project significance.

[2] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

Failure to Model All Required Demolition

According to the CalEEMod User's Guide, "[h]aul trips are based on the amount of material that is demolished, imported or exported assuming a truck can handle 16 cubic yards of material."[3] Therefore, the air model calculates a default number of hauling trips based upon the amount of demolition material inputted into the model. According to the DEIR:

> "During Phase 1, it was assumed that *41,660-SF of buildings* and *6,000-SF of pavement* would require demolition. For Phases 2 and 3, it was assumed that a total of *131,000 square feet of pavement* would require demolition" (p. 4.2-25).

As such, the models should have included at least 178,660-SF of demolition.[4] When correctly inputting 178,660-SF of building demolition, the model calculates a default demolition hauling trip number of 812 trips. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include only 381 total default hauling trips, which were artificially increased to 400 hauling trips (see excerpts below) (Appendix C-1, pp. 13, 61, 105; Appendix C-2, pp. 42).

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition - Phase 1	6	80.00	20.00	200.00
Site Preparation - Phase 1	7	50.00	10.00	0.00
Grading - Phase 1	6	80.00	10.00	0.00
Building Construction - Phase 1	9	120.00	30.00	0.00
Paving - Phase 1	6	40.00	10.00	0.00
Architectural Coating - Phase 1	1	80.00	20.00	0.00
Demolition - Phases 2 and 3	6	100.00	40.00	200.00
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00
Grading - Phases 2 and 3	6	160.00	20.00	1,720.00
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00
Paving - Phases 2 and 3	6	80.00	20.00	0.00
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00

2-14 Cont.

[3] http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14

[4] Calculated: (41,660-SF of buildings demolition) + (6,000-SF of pavement demolition) + (131,000-SF of pavement demolition) = 178,660-SF of demolition.

3

As you can see in the excerpts above, the ***default*** number of demolition hauling trips was underestimated by 431 trips.[5] As such, the models fail to include the total amount of demolition required for the Project.

This underestimation presents an issue, as the total amount of demolition material is used by CalEEMod to determine emissions associated with this phase of construction; the three primary operations that generate dust emission during the demolition phase are mechanical or explosive dismemberment, site removal of debris, and on-site truck traffic on paved and unpaved road.[6] By failing to include the total amount of required demolition, the models underestimate emissions associated with fugitive dust, site removal, as well as exhaust from hauling trucks traveling to and from the site, and should not be relied upon to determine the significance of the Project's air quality impacts.

Unsubstantiated Changes to Acres of Grading Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include reductions to the default acres of grading values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	21.50	0.74
tblGrading	AcresOfGrading	21.00	3.14

As you can see in the excerpt above, the acres of grading values were reduced by approximately 97%, from the default value of 21.5- to 0.74-acres, and 85%, from the default value of 21- to 3.14-acres. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[7] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). Furthermore, regarding the acres of grading value, the DEIR states:

> "During grading activities, fugitive dust can be generated from the movement of dirt on the Project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Each of those activities is calculated differently in CalEEMod, ***based on the number of acres traversed by the grading equipment***" (emphasis) (p. 4.2-23).

However, these reductions remain unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised acres of grading value. Second, according to the CalEEMod User's Guide:

> "[T]he dimensions (e.g., length and width) of the grading site have no impact on the calculation, only the total area to be graded. In order to properly grade a piece of land multiple passes with

2-14 Cont.

[5] Calculated: (812 demolition hauling trips) – (381 trips demolition hauling trips) = 431 demolition hauling trips.
[6] CalEEMod User Guide, Appendix A, p. 11, *available at:* http://www.caleemod.com/
[7] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

equipment may be required. The acres is based on the equipment list and days in grading or site preparation phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday."[8]

Thus, as the dimensions of the Project site have no impact on the acres of grading value, and the DEIR fails to substantiate this change, we cannot verify the revised acres of grading values.

These unsubstantiated reductions present an issue, as CalEEMod uses the acres of grading value to estimate the dust emissions associated with grading.[9] Thus, by including unsubstantiated reductions to the default acres of grading values, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Moisture Content Bulldozing Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several changes to the default material moisture content bulldozing values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00
tblGrading	MaterialMoistureContentBulldozing	7.90	17.00

As you can see in the excerpt above, the material moisture content bulldozing values were increased from the default value of 7.9% to 17%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[10] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material moisture content bulldozing values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

2-14 Cont.

[8] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[9] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 9.
[10] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

These unsubstantiated changes present an issue, as CalEEMod uses the material moisture content bulldozing values to calculate the dust emission factor associated with bulldozing.[11] Specifically, CalEEMod utilizes the following equations:[12]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is an inverse relationship between material moisture content and dust emission factors. In other words, *when the material moisture content percentage increases, the dust emission factor decreases*. As such, by including unsubstantiated increases to the material moisture content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Material Silt Content Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and the "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default material silt content values (see excerpt below) (Appendix C-1, pp. 6, 54, 98; Appendix C-2, pp. 36).

Table Name	Column Name	Default Value	New Value
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30
tblGrading	MaterialSiltContent	6.90	3.30

As you can see in the excerpt above, the material silt content values were increased from the default value to 6.9% to 3.3%. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[13] According to the "User Entered Comments & Non-Default Data" table, the

2-14 Cont.

[11] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[12] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[13] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

justification provided for these changes is: "17,000 CY of soil export during Phase 2" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34).

However, this change remains unsupported for two reasons. First, the justification provided by the "User Entered Comments & Non-Default Data" table fails to address the revised material silt content values. Second, the DEIR and associated documents fail to mention or justify these changes whatsoever.

These unsubstantiated changes present an issue, because CalEEMod uses the material silt content values to calculate the dust emission factor associated with bulldozing.[14] Specifically, CalEEMod utilizes the following equations:[15]

$$EF_{TSP} = \frac{C_{TSP} \times s^{1.2}}{M^{1.3}}, \text{ and } EF_{PM2.5} = EF_{TSP} \times F_{PM2.5}$$

$$EF_{PM15} = \frac{C_{PM15} \times s^{1.5}}{M^{1.4}}, \text{ and } EF_{PM10} = EF_{PM15} \times F_{PM10}$$

Where:
EF = emission factor (lb/hr)
C = arbitrary coefficient used by AP-42
M = material moisture content (%)
S = material silt content (%)
F = scaling factor

As demonstrated above, there is a direct relationship between material silt content and dust emission factors. In other words, *when the material silt content percentage decreases, the dust emission factor decreases as well*. As such, by including unsubstantiated increases to the material silt content values, the models may underestimate the emissions associated with bulldozing. Thus, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Hauling Trip Numbers

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several changes to the default hauling trip numbers (see excerpt below) (Appendix C-1, pp. 6-7, 54, 98).

[14] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.
[15] "Appendix A Calculation Details for CalEEMod." *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 10.

7

Table Name	Column Name	Default Value	New Value
tblTripsAndVMT	HaulingTripNumber	189.00	200.00
tblTripsAndVMT	HaulingTripNumber	192.00	200.00
tblTripsAndVMT	HaulingTripNumber	2,125.00	1,720.00

As you can see in the excerpt above, the number of hauling trips was collectively reduced by 386 trips, from the cumulative default value of 2,506 trips to 2,120 trips.[16] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[17] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated per applicant" (Appendix C-1, pp. 4, 52, 96). Furthermore, the DEIR states:

> "Haul truck trips during the demolition and grading phases were based on demolition and earthwork quantities provided" (p. 4.2-25).

However, these justifications are insufficient, as the DEIR and associated documents fail to provide the calculations or explain how the revised hauling trip numbers were derived "based on demolition and earthwork quantities." As such, we cannot verify the revised hauling trip numbers.

These unsubstantiated changes present an issue, as CalEEMod uses number of hauling trips to estimate the construction-related emissions associated with on-road vehicles.[18] Thus, by including unsubstantiated changes to the default hauling trip numbers, the model may underestimate the Project's mobile-source construction-related emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Unsubstantiated Changes to Architectural and Area Coating Areas

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" and "Pacific Coast Commons Specific Plan Project Mit" models include several reductions to the default architectural and area coating areas (see excerpt below) (Appendix C-1, pp. 5, 52-53, 96-97; Appendix C-2, pp. 34-35).

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	212,395.00	212,213.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	0.00
tblArchitecturalCoating	ConstArea_Residential_Interior	637,184.00	636,338.00
tblAreaCoating	Area_Parking	19071	1959

[16] Calculated: (189 + 192 + 2,125 default hauling trips) – (200 + 200 + 1,720 revised hauling trips) = 386 net decrease in hauling trips.
[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 34.

As you can see in the excerpt above, the architectural coating areas were reduced by 850,607-SF, from the cumulative default value of 1,699,158- to 848,551-SF;[19] and the area coating area for the proposed parking land use was reduced by 17,112-SF, from the default value of 19,701- to 1,959-SF.[20] As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Updated SF per phase" (Appendix C-1, pp. 4, 52, 96; Appendix C-2, pp. 34). However, these reductions remain unsupported for two reasons.

First, the DEIR and associated documents fail to mention or justify the changes to the construction-related architectural coating areas whatsoever. As such, we cannot verify the revised architectural coating areas.

Second, regarding the operational area coating areas, the DEIR states:

> "*Consistent with CalEEMod defaults*, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. *For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide*" (emphasis added) (p. 4.2-28).

As demonstrated above, the DEIR claims that the Project's area coating areas are consistent with CalEEMod defaults. Thus, as the area coating area was reduced from the default value, the change is unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised area coating area.

These unsubstantiated reductions present an issue, as CalEEMod uses architectural and area coating areas to calculate ROG emissions associated with painting and reapplication.[22] Thus, by including unsubstantiated reductions to the default architectural and area coating areas, the models may underestimate the Project's area-source emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[19] Calculated: (212,395-SF + 212,395-SF + 637,184-SF + 637,184-SF default architectural coating areas) – (212,213-SF + 636,338-SF revised architectural coating areas) = 850,607-SF net decrease in architectural coating areas.
[20] 19,70-SF default area coating area –1,959-SF revised area coating area = 17,112-SF net decrease inn area coating area.
[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[22] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 35, 42.

9

Underestimated Operational Vehicle Trip Rates

According to the Traffic Impact Analysis ("TIA"), provided in Appendix J-1 to the DEIR, the Project is expected to generate approximately 2,517 average daily vehicle trips (see excerpt below) (p. 30, Table 4).

Land Use	ITE Land Use Code	Size	Trip Generation Rates [a]							Daily
			Daily	AM Peak Hour			PM Peak Hour			
				Rate	In%	Out%	Rate	In%	Out%	
PROPOSED PROJECT										
Pacific Coast Commons North										
Residential Units [b]	221	143 DU	Equation	Equation	24%	76%	Equation	61%	39%	778
Less: Transit/Walk/Bike			5%	5%			5%			*(39)*
Total Driveway Trips										739
Retail	820	2.223 ksf	37.75	0.94	62%	38%	3.81	48%	52%	84
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										80
Fairfield Parking										
Retail	820	3.273 ksf	37.75	0.94	62%	38%	3.81	48%	52%	124
Less: Transit/Walk/Bike			5%	5%			5%			*(6)*
Total Driveway Trips										118
Pacific Coast Commons South										
Residential Units [b]	221	120 DU	Equation	Equation	24%	76%	Equation	61%	39%	652
Less: Transit/Walk/Bike			5%	5%			5%			*(33)*
Total Driveway Trips										619
Retail	820	2.056 ksf	37.75	0.94	62%	38%	3.81	48%	52%	78
Less: Transit/Walk/Bike			5%	5%			5%			*(4)*
Total Driveway Trips										74
Fast Casual Restaurant [c]	930	3.700 ksf	315.17	14.13	55%	45%	14.13	55%	45%	1,166
Less: Transit/Walk/Bike			5%	5%			5%			*(58)*
Total Driveway Trips										1,108
Less: Pass-by [d]			20%	20%			20%			*(221)*
Net External Vehicle Trips										887
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										2,517

As such, the models should have included trip rates that reflect the number of average daily operational vehicle trips estimated by the TIA. However, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes only 2,506.08 weekday and 2,271.19 Saturday vehicle trips (see excerpt below) (Appendix C-1, pp. 42, 90, 134).

	Average Daily Trip Rate		
Land Use	Weekday	Saturday	Sunday
Apartments Mid Rise	1,357.08	1,304.48	1196.65
Enclosed Parking with Elevator	0.00	0.00	0.00
High Turnover (Sit Down Restaurant)	887.00	1,104.78	919.71
Other Asphalt Surfaces	0.00	0.00	0.00
Regional Shopping Center	262.00	306.60	154.83
Total	2,506.08	2,715.86	2,271.19

As you can see in the excerpt above, the weekday and Sunday trip numbers are underestimated by approximately 11- and 246-trips, respectively. As such, the trip rates inputted into the proposed land use models are underestimated and inconsistent with the information provided by the TIA.

10

2-14 Cont.

These inconsistencies present an issue, as CalEEMod uses the operational vehicle trip rates to calculate the emissions associated with the Project's operational on-road vehicles.[23] Thus, by including underestimated operational vehicle trip rates, the model underestimates the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Unsubstantiated Changes to Energy Use Values

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several reductions to the default energy use values (see excerpt below) (Appendix C-1, pp. 5-6, 53, 97).

Table Name	Column Name	Default Value	New Value
tblEnergyUse	T24E	179.76	176.16
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	8.71	7.78
tblEnergyUse	T24E	2.93	2.62
tblEnergyUse	T24NG	5,911.46	5,615.89
tblEnergyUse	T24NG	78.56	77.77
tblEnergyUse	T24NG	0.95	0.94

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[24] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume compliance with 2019 Title 24 Standards" (Appendix C-1, pp. 4, 52, 96). Furthermore, regarding 2019 Title 24 Standards, the DEIR states:

> "CalEEMod assumes compliance with the 2016 Title 24 Building Energy Efficiency Standards. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards, which became effective on January 1, 2020" (p. 4.2-28).

However, these justifications are insufficient. Simply because the 2019 Title 24 standards ***expect*** a reduction in building energy consumption does not ***guarantee*** that these reductions would be implemented locally on the Project site. Absent additional information demonstrating that these reductions would be achieved through the implementation, monitoring, and enforcement of energy-related mitigation measures, we are unable to verify the revised energy use values inputted into the model.

These unsubstantiated reductions present an issue, as CalEEMod uses the energy use values to calculate the Project's emissions associated with building electricity and non-hearth natural gas usage.[25] By including unsubstantiated changes to the default energy use values, the model may underestimate the Project's energy-source operational emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[23] "CalEEMod User Guide." CAPCOA, November 2017, *available at:* http://www.caleemod.com/, p. 35.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 43

Unsubstantiated Changes to Wastewater Treatment System Percentages

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes several manual changes to the default wastewater system percentages (see excerpt below) (Appendix C-1, pp. 8, 55-56, 99-100).

Table Name	Column Name	Default Value	New Value
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

As you can see in the excerpt above, the model assumes that the Project's wastewater would be treated 100% aerobically. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[26] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Assume 100% aerobic" (Appendix C-1, pp. 4, 52, 96). However, these changes remain unsupported. According to the DEIR:

> "Water consumption estimates for both indoor and outdoor water use and *associated electricity consumption from water use and wastewater generation were estimated using default values in CalEEMod*" (p. 4.6-27).

As demonstrated above, the DEIR claims that the electricity consumption from wastewater generation was estimated using the CalEEMod default values. Thus, the changes to the wastewater treatment system percentages are unsubstantiated and inconsistent with the information provided in the DEIR. As such, we cannot verify the revised values.

These inconsistencies present an issue, as each type of wastewater treatment system is associated with different GHG emission factors, which are used by CalEEMod to calculate the Project's total GHG emissions.[27] Thus, by including unsubstantiated changes to the default wastewater treatment system percentages, the model may underestimate the Project's GHG emissions and should not be relied upon to determine Project significance.

2-14 Cont.

[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 45.

Incorrect Application of Construction-Related Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following construction-related mitigation measures (see excerpt below) (Appendix C-1, pp. 14, 62, 106):

3.1 Mitigation Measures Construction

Replace Ground Cover
Water Exposed Area

Furthermore, review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project Mit" model includes the following construction-related mitigation measure (see excerpt below) (Appendix C-2, pp. 43):

3.1 Mitigation Measures Construction

Water Exposed Area

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[28] According to the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project" model, the justification provided for the inclusion of these measures is: "Water three times daily and replace ground cover" (Appendix C-1, pp. 4, 52, 96). However, no justification was provided by the "User Entered Comments and Non-Default Data" table for the "Pacific Coast Commons Specific Plan Project Mit" model. Furthermore, the DEIR states:

> "The proposed Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active sites three times per day depending on weather conditions" (p. 4.2-34).

However, the inclusion of the above-mentioned construction-related mitigation measures remains unsupported. Simply because the DEIR states that the Project would comply with SCAQMD Rule 403 does not justify the inclusion of the above-mentioned construction-related mitigation measures in the models. According to the Association of Environmental Professionals ("AEP") *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the

2-14 Cont.

[28] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[29]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with SCAQMD Rule 403, is unsubstantiated. By including construction-related mitigation measures without properly committing to their implementation, the models may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

Incorrect Application of Mobile-Related Operational Mitigation Measures

Review of the CalEEMod output files demonstrates that the "Pacific Coast Commons Specific Plan Project" model includes the following mobile-, water-, and waste-related operational mitigation measures (see excerpt below) (Appendix C-1, pp. 42, 47, 49, 90, 134):

Mobile-Related:

4.1 Mitigation Measures Mobile

Improve Destination Accessibility
Increase Transit Accessibility
Improve Pedestrian Network

Water-Related:

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Waste-Related:

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for the inclusion of the mobile-, water-, and waste-related measures are: "Increase transit accessibility (0.2 miles) and improve pedestrian network," "Reduce water consumption by 20% per CalGreen," and "Assume 50% waste disposed per AB 939" (Appendix C-1, pp. 4, 52, 96). However, the inclusion of these operational mitigation measures remains unsupported for three reasons.

2-14 Cont.

[29] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[30] CalEEMod User Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 2, 9.

14

First, the DEIR fails to mention or justify the inclusion of the above-mentioned operational mitigation measures.

Second, the inclusion of these operational mitigation measures, based on the Project's compliance with existing policies and regulations, is unsupported. As previously stated, according to the AEP *CEQA Portal Topic Paper* on mitigation measures:

> "By definition, *mitigation measures are not part of the original project design*. Rather, mitigation measures are actions taken by the lead agency to reduce impacts to the environment resulting from the original project design. Mitigation measures are identified by the lead agency after the project has undergone environmental review and are *above-and-beyond existing laws, regulations, and requirements* that would reduce environmental impacts" (emphasis added).[31]

As you can see in the excerpt above, mitigation measures "are not part of the original project design" and are intended to go "above-and-beyond" existing regulatory requirements. As such, the inclusion of these measures, based solely on the Project's compliance with existing policies and regulations, is unsubstantiated.

Third, AEP guidance states:

> "While not "mitigation", a good practice is *to include those project design feature(s) that address environmental impacts in the mitigation monitoring and reporting program (MMRP)*. Often the MMRP is all that accompanies building and construction plans through the permit process. If the design features are not listed as important to addressing an environmental impact, *it is easy for someone not involved in the original environmental process to approve a change to the project that could eliminate one or more of the design features without understanding the resulting environmental impact*" (emphasis added).[32]

As you can see in the excerpts above, design features that are not formally included as mitigation measures may be eliminated from the Project's design altogether. Thus, as the above-mentioned mobile-, water-, and waste-related operational measures are not formally included as mitigation measures, we cannot guarantee that they would be implemented, monitored, and enforced on the Project site. As a result, the inclusion of the above-mentioned operational mitigation measures in the model is incorrect. By including several operational mitigation measures without properly committing to their implementation, the model may underestimate the Project's operational emissions and should not be relied upon to determine Project significance.

2-14 Cont.

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The DEIR concludes that the proposed Project would result in a less-than-significant health risk impact based on a quantified construction health risk analysis ("HRA"). Specifically, the DEIR estimates that

[31] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 5.
[32] "CEQA Portal Topic Paper Mitigation Measures." AEP, February 2020, *available at:* https://ceqaportal.org/tp/CEQA%20Mitigation%202020.pdf, p. 6.

Project construction would result in a mitigated excess cancer risk of 4.23 in one million, which would not exceed the threshold of 10 in one million (see excerpt below) (p. 4.2-38, Table 4.2-13).

Table 4.2-13. Summary of Maximum Cancer and Chronic Health Risks - Mitigated

Impact Analysis	Impact Parameter	Units	Project Impact	CEQA Threshold	Level of Significance
Maximally Exposed Individual Resident					
Construction HRA	Cancer Risk	Per Million	4.23	10	Less than Significant
	Chronic Hazard Index	Index Value	0.002	1.0	Less than Significant

Source: See Appendix C-2 for complete results.
Notes: CEQA = California Environmental Quality Act; HRA = Health Risk Assessment

However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the less-than-significant impact conclusion, is incorrect for three reasons.

First, the DEIR's construction HRA is incorrect, as it relies upon an exhaust PM_{10} estimate from a flawed air model (Appendix C-2, p. 9). As previously discussed, when we reviewed the Project's CalEEMod output files, provided in the CalEEMod Outputs as Appendix C-1 and the HRA Report as Appendix C-2 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR and associated documents. As a result, the construction HRA utilizes an underestimated diesel particulate matter ("DPM") concentration to calculate the cancer risk associated with Project construction. As such, the DEIR underestimates the Project's construction-related cancer risk and should not be relied upon to determine Project significance.

Second, the DEIR fails to evaluate the Project's operational toxic air contaminants ("TACs") and associated health risk impacts. This is incorrect, as the TIA indicates that the proposed land uses are expected to generate approximately 2,517 average daily vehicle trips, which will generate additional exhaust emissions and continue to expose nearby sensitive receptors to DPM emissions (p. 30, Table 4). The DEIR fails to discuss the potential TACs associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate the increase in emissions generated by the Project with the potential adverse impacts on human health.

Third, the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015, as referenced by HRA Report (Appendix C-2, p. 7).[33] The OEHHA document recommends that exposure from projects lasting more than 6 months be evaluated for the duration of the project and recommends that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR").[34] Even though we were not provided with the expected lifetime of

2-14 Cont.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html
[34] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-6, 8-15

the Project, we can reasonably assume that the Project will operate for at least 30 years, if not more. Therefore, we recommend that health risk impacts from Project operation also be evaluated, as a 30-year exposure duration vastly exceeds the 6-month requirement set forth by OEHHA. This recommendation reflects the most recent state health risk policies, and as such, we recommend that an analysis of health risk impacts posed to nearby sensitive receptors from Project operation be included in an updated EIR for the Project.

Fourth, while the DEIR includes an HRA evaluating the potential health risk impacts posed by Project construction to nearby, existing receptors, the HRA fails to evaluate the ***cumulative*** lifetime cancer risk to nearby, existing receptors as a result of all phases of Project ***construction and operation together***. According to OEHHA guidance, as referenced by the HRA Report, "the excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk at the receptor location" (Appendix C-2, p. 7).[35] However, the DEIR's HRA fails to sum each age bin to evaluate the total cancer risk over the course of Project construction and operation. This is incorrect and, thus, an updated EIR should be prepared to quantify the cumulative excess cancer risk posed by Project construction and operation to nearby, existing receptors, and compare it to the SCAQMD threshold of 10 in one million.

Screening-Level Assessment Indicates a Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[36] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[37] and the California Air Pollution Control Officers Associated (CAPCOA)[38] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to sensitive receptors using the annual PM_{10} exhaust estimates from the DEIR's annual CalEEMod output files, consistent with the HRA Report's methodology (Appendix C-2, p. 9). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the 3rd trimester stage of life. Subtracting the 1,034-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project's operational DPM for an additional 27.17 years, approximately. The DEIR's CalEEMod model indicates that operational activities will generate approximately 87 pounds of DPM per year of operation. The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward

2-14 Cont.

[35] "Guidance Manual for preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf p. 8-4
[36] U.S. EPA (April 2011) AERSCREEN Released as the EPA Recommended Screening Model, http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[37] Supra, fn 20.
[38] CAPCOA (July 2009) Health Risk Assessments for Proposed Land Use Projects, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

17

concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project operation, we calculated an average DPM emission rate by the following equation.

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{87.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00126\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.00126 g/s. Operation was simulated as a 6.39-acre rectangular area source in AERSCREEN, with dimensions of 256 meters by 101 meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant to be estimated by multiplying the single-hour concentration by 10%.[39] According to the HRA Report, the closest residential receptors are located 25 feet west of the Project site (Appendix C-2, p. 1). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed receptor is located approximately 125 meters from the Project site. Thus, for Project operation, the single-hour concentration at the MEIR estimated by AERSCREEN is approximately 1.937µg/m^3 DPM at approximately 125 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.1937 µg/m^3 for Project operation at the MEIR.

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA. Consistent with the construction period of 1,034 days inputted into the DEIR's CalEEMod model, the annualized average concentration for Project operation was used for the remaining 13.42 years of the child stage of life (2 - 16 years) and the entire adult stage of life (16 – 30 years).

Consistent with the HRA Report's methodology, we used Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution (Appendix C-2, p. 7). When applying ASFs, the quantified cancer risk should be multiplied by a factor of ten during the third trimester of pregnancy and during the first two years of life (infant), as well as multiplied by a factor of three during the child stage of life (2 – 16 years). Furthermore, in accordance with the guidance set forth by OEHHA, we used the 95th percentile breathing rates for infants.[40] Finally, according to SCAQMD guidance, we used a Fraction of Time At Home ("FAH") Value of 1 for the 3rd trimester and

2-14 Cont.

[39] U.S. EPA (October 1992) Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised, http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.

[40] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," July 2018, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588supplementalguidelines.pdf, p. 16.
"Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

infant receptors.[41] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

As demonstrated in the table above, the excess cancer risk to adults and children at the MEIR located approximately 125 meters away, over the course of Project operation, utilizing ASFs, are approximately 7.8 and 67 in one million, respectively. When summing the Project's estimated operational cancer risks, as estimated by SWAPE, with the DEIR's purported construction-related cancer risk of 4.23 in one million, we estimate a lifetime excess cancer risk of approximately 79 in one million (p. 18). Thus, the child and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the DEIR.

2-14 Cont.

An agency must include an analysis of health risks that connects the Project's air emissions with the health risk posed by those emissions. Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level construction and operational HRA shown above is to demonstrate the link between the proposed Project's emissions and the potential health risk. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. Therefore, since our screening-level construction HRA indicates a potentially significant impact, an updated EIR should include a reasonable effort to connect the Project's air quality emissions and the potential health risks posed to nearby receptors. Thus, an updated EIR should include a quantified air pollution model as well as an updated, quantified refined health risk assessment which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

[41] "Risk Assessment Procedures for Rules 1401, 1401.1, and 212." SCAQMD, August 2017, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Emissions

The DEIR estimates that the Project would generate net annual greenhouse gas ("GHG") emissions of 2,920.96 metric tons of carbon dioxide equivalents per year ("MT CO_2e/year"), which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4).

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	951.51	0.03	0.01	955.38
Mobile	1,764.82	0.08	0.00	1,766.93
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	65.90
			Total Emissions	2,920.96
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Furthermore, the DEIR relies upon the Project's consistency with the City of El Segundo Climate Action Plan ("CAP"), SCAG's 2020-2045 *RTP/SCS*, CALGreen, CARB's *Scoping Plan*, and the General Plan's Air Quality Element, as well as EO S-3-05 and SB 32, in order to conclude that the Project would result in a less-than-significant GHG impact (p. 4.6-29 - 4.6-48). However, the DEIR's GHG analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for five reasons.

2-14 Cont.

(1) The DEIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air model;
(2) The DEIR's quantitative GHG analysis relies upon an outdated threshold;
(3) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(4) The DEIR fails to consider the performance-based standards under CARB's *Scoping Plan*; and
(5) The DEIR fails to consider the performance-based standards under SCAG's *RTP/SCS*.

1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the DEIR's quantitative GHG analysis is unsubstantiated. As previously discussed, when we reviewed the CalEEMod Outputs, provided as Appendix C-1 to the DEIR, we found that several of the values inputted into the model are not consistent with information disclosed in the DEIR. As a result, the model underestimates the Project's emissions, and the DEIR's quantitative GHG analysis should not be relied upon to determine Project significance. An updated EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the surrounding environment.

2) Incorrect Reliance on an Outdated Quantitative GHG Threshold

As previously discussed, the DEIR estimates that the Project would generate net annual GHG emissions 2,920.96 MT CO_2e/year, which would not exceed the SCAQMD bright-line threshold of 3,000 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). However, the guidance that provided the 3,000 MTCO_2/year threshold, the SCAQMD's 2008 *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans* report, was developed when the Global Warming Solutions Act of 2006, commonly known as "AB 32", was the governing statute for GHG reductions in California. AB 32 requires California to reduce GHG emissions to 1990 levels by 2020.[42] As it is already April 2021, thresholds for 2020 are not applicable to the proposed Project. As such, the SCAQMD bright-line threshold of 3,000 MT CO_2e/year is outdated and inapplicable to the proposed Project, and the DEIR's less-than-significant GHG impact conclusion should not be relied upon.

Instead, we recommend that the Project apply the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[43] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 metric tons of CO_2 equivalents per service population per year ("MT CO_2e/SP/year").[44] In support of thresholds for projects with a horizon year beyond 2020, AEP's guidance *states:*

> "Once the state has a full plan for 2030 (which is expected in 2017), and then *a project with a horizon between 2021 and 2030 should be evaluated based on a threshold using the 2030 target*. A more conservative approach would be to apply a 2030 threshold *based on SB 32* for any project with a horizon between 2021 and 2030 regardless of the status of the Scoping Plan Update" (emphasis added).[45]

As the California Air Resources Board ("CARB") adopted *California's 2017 Climate Change Scoping Plan* in November of 2017, the proposed Project "should be evaluated based on a threshold using the 2030 target," according to the relevant guidance referenced above. We recommend the preparation of an updated EIR to compare the Project's estimated GHG emissions, as estimated in an updated air model,

2-14 Cont.

[42] HEALTH & SAFETY CODE 38550, *available at:* https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC&sectionNum=38550.
[43] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YlxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at:* https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.
[44] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.
[45] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

to the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[46] and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year.

3) Failure to Identify a Potentially Significant GHG Impact

When applying the widely-used 2030 "Substantial Progress" threshold of 660 MT CO_2e/year[47] and AEP "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year,[48] the DEIR's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.[49] As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,920.96 MT CO_2e/year (p. 4.6-28 – 4.6-29, Table 4.6-4). Furthermore, according to CAPCOA's *CEQA & Climate Change* report, service population is defined as "the sum of the number of residents and the number of jobs supported by the project."[50] The DEIR estimates that the Project would house and employ approximately 618 residents and 56 employees, respectively, resulting in a service population of 674 people (p. IV.G-17, Table IV.G-4; IV.G-19, Table IV.G-5).[51] When dividing the Project's GHG emissions, as estimated by the DEIR, by a service population of 674 people, we find that the Project would emit approximately 4.3 MT CO_2e/SP/year (see table below).[52]

2-14 Cont.

[46] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[47] See: "JEFFERSON UNION HIGH SCHOOL DISTRICT FACULTY & STAFF HOUSING PROJECT AIR QUALITY & GREENHOUSE GAS ASSESSMENT." City of Daly City, June 2019, *available at:* https://files.ceqanet.opr.ca.gov/257215-2/attachment/k-aC8VdC7LV3xz75yuUmtGiiExH-Y7HEPQ-dU-YIxuhNp95Dx9bK_TbVP3sWar00-Zx87dh7ji80vbRH0, p. 7; "TO 20-01 PAPÉ MACHINERY AIR QUALITY & GREENHOUSE GAS EMISSIONS ASSESSMENT." City of Fremont, February 2020, *available at:* "SOLAR4AMERICA ICE FACILITY EXPANSION AIR QUALITY AND GREENHOUSE GAS EMISSION ASSESSMENT." City of San Jose, September 2019, *available at*: https://www.fremont.gov/DocumentCenter/View/44974/4_Appendix-1_Air-Quality-GHG-Assessment, p. 18; and https://www.sanjoseca.gov/Home/ShowDocument?id=45200, p. 6.

[48] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[49] "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals (AEP), October 2016, *available at:* https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 40.

[50] CAPCOA (Jan. 2008) CEQA & Climate Change, p. 71-72, http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf.

[51] Calculated: 618 residents + 56 employees = 674 service population.

[52] Calculated: (2,920.96 MT CO_2e/year) / (674 service population) = (4.3 MT CO_2e/SP/year).

DEIR Modeling Greenhouse Gas Emissions	
Project Phase	**Proposed Project (MT CO_2e/year)**
Net Annual GHG Emissions	**2,921**
Threshold	660
Exceed?	***Yes***
Service Population	674
Service Population Efficiency	**4.3**
Threshold	2.6
Exceed?	***Yes***

As demonstrated above, the Project's net annual GHG emissions and service population efficiency, as estimated by the DEIR, exceed the 2030 "Substantial Progress" threshold of 660 MT CO_2e/SP/year and AEP's "2030 Land Use Efficiency Threshold" of 2.6 MT CO_2e/SP/year, respectively. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. An updated EIR should be prepared for the Project and mitigation measures should be implemented to reduce the Project's GHG emissions to less-than-significant levels.

4) Failure to Consider Performance-based Standards Under CARB's 2017 Scoping Plan

As previously discussed, the DEIR relies upon the Project's consistency with CARB's 2017 *Scoping Plan* to determine Project GHG significance (p. 4.6-41 – 4.6-45). However, this is incorrect, as the DEIR fails to consider performance-based measures proposed by CARB.

2-14 Cont.

i. Passenger & Light Duty VMT Per Capita Benchmarks per SB 375

In reaching the State's long-term GHG emission reduction goals, CARB's 2017 *Scoping Plan* explicitly cites to SB 375 and the VMT reductions anticipated under the implementation of Sustainable Community Strategies.[53] CARB has identified the population and daily VMT from passenger autos and light-duty vehicles at the state and county level for each year between 2010 to 2050 under a "baseline scenario" that includes "current projections of VMT included in the existing Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCSs) adopted by the State's 18 Metropolitan Planning Organizations (MPOs) pursuant to SB 375 as of 2015."[54] By dividing the projected daily VMT by the population, we calculated the daily VMT per capita for each year at the state and county level for 2010 (baseline year), 2025 (Project operational year), and 2030 (target years under SB 32) (see table below and Attachment B).

[53] "California's 2017 Climate Change Scoping Plan." CARB, November 2017, *available at*: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, p. 25, 98, 101-103.
[54] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," Excel Sheet "Readme." CARB, January 2019, *available at*: https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

The below table compares the 2017 *Scoping Plan* daily VMT per capita values against the daily VMT per capita values for the Project based on SWAPE's updated modeling (see table below and Attachment B).

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project
	SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

As shown above, SWAPE's updated modeling shows that the Project exceeds the CARB 2017 *Scoping Plan* projections for 2010, 2025, and 2030. Because the exceeds the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the Project conflicts with the CARB 2017 *Scoping Plan* and SB 375. As such, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. Project-specific EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

5) Failure to Consider Performance-based Standards under SCAG's RTP/SCS

Here, as discussed above, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 4.6-34 – 4.6-37). However, the DEIR fails to consider whether or not the Project meets any of the specific performance-based goals underlying SCAG's *RTP/SCS* and SB 375, such as: i) per capita GHG emission targets, or ii) daily vehicles miles traveled ("VMT") per capita benchmarks.

2-14 Cont.

i. SB 375 Per Capita GHG Emission Goals

SB 375 was signed into law in September 2008 to enhance the state's ability to reach AB 32 goals by directing CARB to develop regional 2020 and 2035 GHG emission reduction targets for passenger vehicles (autos and light-duty trucks). In March 2018, CARB adopted updated regional targets requiring a 19 percent decrease in VMT for the SCAG region by 2035. This goal is reflected in SCAG's 2020 RTP/SCS Program Environmental Impact Report ("PEIR"),[55] in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (*see* excerpt below).[56]

Table 3.8-10
SB 375 Analysis

	2005 (Baseline)	2020 (Plan)	2035 (Plan)
Resident population (per 1,000)	17,161	19,194	21,110
CO2 emissions (per 1,000 tons)	204.0/a/	204.5/a/	198.6/b/
Per capita emissions (pounds/day)	23.8	21.3	18.8
% difference from Plan (2020) to Baseline (2005)			–8%
% difference from Plan (2035) to Baseline (2005)			–19%

Note:
/a/ Based on EMFAC2007
/b/Based on EMFAC2014 and SCAG modeling, 2019.
/c/ Includes off-model adjustments for 2035 and 2045
Source: SCAG modeling, 2019.
http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf

In order to evaluate consistency with this SB 375 objective and SCAG's *RTP/SCS* performance-based goal, SWAPE calculated the Project's per-capita CO_2 emissions from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, total annual GHG mobile emissions were multiplied by the percentage of auto and light-duty truck fleet mix, then converted into total pounds per day, then divided by the estimated service population of 674. The below table shows the per capita emissions for the Project based on SWAPE's updated modeling (see table below and Attachment B).

2-14 Cont.

[55] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618.
[56] "Connect SoCal Certified Final Program Environmental Impact Report." SCAG, May 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_complete.pdf?1607981618, p. 3.8-74.

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2045 Target) Exceeded?	Yes

As shown in the above table, when utilizing the DEIR's modeling, the Project would result in 20.87 pounds per day per service population ("lbs/day/SP") emissions. This exceeds SCAG's 2035 target of 18.8-lbs/day/SP, indicating that the Project is inconsistent with SB 375 and SCAG's *RTP/SCS*.

i. SB 375 RTP/SCS Daily VMT Per Capita Target

Under the SCAG's 2020 *RTP/SCS*, daily VMT per capita in the SCAG region should decrease from 23.2 VMT in 2016 to 20.7 VMT by 2045.[57] Daily VMT per capita in Los Angeles County should decrease from 22.2 to 19.2 VMT during that same period.[58]

Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. In order to evaluate consistency with the *RTP/SCS*'s performance-based VMT reduction targets, SWAPE calculated the Project's VMT from passenger and light duty vehicles (calculations attached hereto as Attachment B). First, annual VMTs from passenger automobile and light-duty vehicle were calculated based on the CalEEMod default fleet mix, converted into daily VMT, and divided by the estimated service population of 674. The below table shows the daily VMT per capita for the Project based on SWAPE's updated modeling (see table below and Attachment B).

2-14 Cont.

[57] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[58] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	**Project SWAPE Modeling**
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	**Yes**
20.7 VMT (2045 Target) Exceed?	**Yes**
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	**Yes**
19.2 VMT (2045 Target) Exceed?	**Yes**

As shown in the above table, based on a service population of 674, the Project would result in 24.14 VMT per capita from passenger auto and light-duty truck vehicles. This exceeds all SCAG-wide and Los Angeles County-specific benchmarks and targets under SCAG's 2020 *RTP/SCS*. Thus, based on SWAPE's updated modeling, the Project would exceed the 2016 baseline and 2045 target VMT per capita values for both Los Angeles County and the SCAG region as a whole, indicating that the Project conflicts with the SCAG's *RTP/SCS* and SB 375.

2-14 Cont.

Feasible Mitigation Measures Available to Reduce Emissions

Our analysis demonstrates that the Project would result in potentially significant health risk and GHG impacts that should be mitigated further. In an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project. Feasible mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[59] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CAPCOA's Quantifying Greenhouse Gas Mitigation Measures[60]
Measures – Energy
Building Energy Use
Install Programmable Thermostat Timers
Obtain Third-party HVAC Commissioning and Verification of Energy Savings

[59] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf
[60] "Quantifying Greenhouse Gas Mitigation Measures." California Air Pollution Control Officers Association (CAPCOA), August 2010, *available at:* http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf, p.

Install Energy Efficient Appliances
Install Energy Efficient Boilers
Lighting
Install Higher Efficacy Public Street and Area Lighting
Limit Outdoor Lighting Requirements
Replace Traffic Lights with LED Traffic Lights
Alternative Energy Generation
Establish Onsite Renewable or Carbon-Neutral Energy Systems
Establish Onsite Renewable Energy System – Solar Power
Utilize a Combined Heat and Power System
Measures – Transportation
Land Use/Location
Increase Density
Increase Destination Accessibility
Integrate Affordable and Below Market Rate Housing
Neighborhood/Site Enhancements
Provide Pedestrian Network Improvements, such as: • Compact, mixed-use communities • Interconnected street network • Narrower roadways and shorter block lengths • Sidewalks • Accessibility to transit and transit shelters • Traffic calming measures and street trees • Parks and public spaces • Minimize pedestrian barriers
Provide Traffic Calming Measures, such as: • Marked crosswalks • Count-down signal timers • Curb extensions • Speed tables • Raised crosswalks • Raised intersections • Median islands • Tight corner radii • Roundabouts or mini-circles • On-street parking • Planter strips with trees • Chicanes/chokers
Implement a Neighborhood Electric Vehicle (NEV) Network.
Create Urban Non-Motorized Zones

28

2-14 Cont.

Dedicate Land for Bike Trails
Parking Policy/Pricing
Limit Parking Supply through: • Elimination (or reduction) of minimum parking requirements • Creation of maximum parking requirements • Provision of shared parking
Unbundle Parking Costs from Property Cost
Implement Market Price Public Parking (On-Street)
Require Residential Area Parking Permits
Commute Trip Reduction Programs
Implement Commute Trip Reduction (CTR) Program – Voluntary • Carpooling encouragement • Ride-matching assistance • Preferential carpool parking • Flexible work schedules for carpools • Half time transportation coordinator • Vanpool assistance • Bicycle end-trip facilities (parking, showers and lockers) • New employee orientation of trip reduction and alternative mode options • Event promotions and publications • Flexible work schedule for employees • Transit subsidies • Parking cash-out or priced parking • Shuttles • Emergency ride home
Implement Commute Trip Reduction (CTR) Program – Required Implementation/Monitoring • Established performance standards (e.g. trip reduction requirements) • Required implementation • Regular monitoring and reporting
Provide Ride-Sharing Programs • Designate a certain percentage of parking spaces for ride sharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles • Providing a web site or messaging board for coordinating rides • Permanent transportation management association membership and funding requirement.
Implement Subsidized or Discounted Transit Program
Provide End of Trip Facilities, including: • Showers • Secure bicycle lockers • Changing spaces
Encourage Telecommuting and Alternative Work Schedules, such as: • Staggered starting times • Flexible schedules

2-14 Cont.

29

• Compressed work weeks
Implement Commute Trip Reduction Marketing, such as: • New employee orientation of trip reduction and alternative mode options • Event promotions • Publications
Implement Preferential Parking Permit Program
Implement Car-Sharing Program
Provide Employer-Sponsored Vanpool/Shuttle
Implement Bike-Sharing Programs
Price Workplace Parking, such as: • Explicitly charging for parking for its employees; • Implementing above market rate pricing; • Validating parking only for invited guests; • Not providing employee parking and transportation allowances; and • Educating employees about available alternatives.
Implement Employee Parking "Cash-Out"
Transit System Improvements
Transit System Improvements, including: • Grade-separated right-of-way, including bus only lanes (for buses, emergency vehicles, and sometimes taxis), and other Transit Priority measures. Some systems use guideways which automatically steer the bus on portions of the route. • Frequent, high-capacity service • High-quality vehicles that are easy to board, quiet, clean, and comfortable to ride. • Pre-paid fare collection to minimize boarding delays. • Integrated fare systems, allowing free or discounted transfers between routes and modes. • Convenient user information and marketing programs. • High quality bus stations with Transit Oriented Development in nearby areas. • Modal integration, with BRT service coordinated with walking and cycling facilities, taxi services, intercity bus, rail transit, and other transportation services.
Implement Transit Access Improvements, such as: • Sidewalk/crosswalk safety enhancements • Bus shelter improvements
Expand Transit Network
Increase Transit Service Frequency/Speed
Provide Local Shuttles
Road Pricing/Management
Implement Area or Cordon Pricing
Improve Traffic Flow, such as: • Signalization improvements to reduce delay; • Incident management to increase response time to breakdowns and collisions;

2-14 Cont.

30

• Intelligent Transportation Systems (ITS) to provide real-time information regarding road conditions and directions; and • Speed management to reduce high free-flow speeds.
Required Project Contributions to Transportation Infrastructure Improvement Projects
Install Park-and-Ride Lots
Vehicles
Utilize Alternative Fueled Vehicles, such as: • Biodiesel (B20) • Liquefied Natural Gas (LNG) • Compressed Natural Gas (CNG)
Utilize Electric or Hybrid Vehicles
Measures – Water
Water Supply
Use Reclaimed Water
Use Gray Water
Use Locally Sourced Water Supply
Water Use
Install Low-Flow Water Fixtures
Adopt a Water Conservation strategy
Design Water-Efficient Landscapes (see California Department of Water Resources Model Water Efficient Landscape Ordinance), such as: • Reducing lawn sizes; • Planting vegetation with minimal water needs, such as native species; • Choosing vegetation appropriate for the climate of the project site; • Choosing complimentary plants with similar water needs or which can provide each other with shade and/or water.
Use Water-Efficient Landscape Irrigation Systems ("Smart" irrigation control systems)
Reduce Turf in Landscapes and Lawns
Measures – Area Landscaping
Landscaping Equipment
Prohibit Gas Powered Landscape Equipment
Electric Yard Equipment Compatibility
Measures – Solid Waste
Solid Waste
Recycle Demolished Construction Material
Measures – Vegetation
Vegetation
Urban Tree Planting

2-14 Cont.

31

Create New Vegetated Open Space
Measures – Construction
Construction
Use Alternative Fuels for Construction Equipment
Urban Tree Planting
Use Electric and Hybrid Construction Equipment
Limit Construction Equipment Idling Beyond Regulation Requirements
Institute a Heavy-Duty Off-Road Vehicle Plan, including: • Construction vehicle inventory tracking system; • Requiring hour meters on equipment; • Document the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment; and • Daily logging of the operating hours of the equipment.
Implement a Construction Vehicle Inventory Tracking System
Measures – Miscellaneous
Miscellaneous
Establish a Carbon Sequestration Project, such as: • Geologic sequestration or carbon capture and storage techniques, in which CO_2 from point sources is captured and injected underground; • Terrestrial sequestration in which ecosystems are established or preserved to serve as CO_2 sinks; • Novel techniques involving advanced chemical or biological pathways; or • Technologies yet to be discovered.
Establish Off-Site Mitigation
Use Local and Sustainable Building Materials
Require Environmentally Responsible Purchasing, such as: • Purchasing products with sustainable packaging; • Purchasing post-consumer recycled copier paper, paper towels, and stationary; • Purchasing and stocking communal kitchens with reusable dishes and utensils; • Choosing sustainable cleaning supplies; • Leasing equipment from manufacturers who will recycle the components at their end of life; • Choosing ENERGY STAR appliances and Water Sense-certified water fixtures; • Choosing electronic appliances with built in sleep-mode timers; • Purchasing 'green power' (e.g. electricity generated from renewable or hydropower) from the utility; and • Choosing locally-made and distributed products.

2-14 Cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction*

32

Projects.[61] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

NEDC's *Diesel Emission Controls in Construction Projects*[62]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation. iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b. If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c. All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d. The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting
a. For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

2-14 Cont.

[61] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[62] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

33

ii.	The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.
iii.	The Certification Statement signed and printed on the contractor's letterhead.
b.	The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes:
i.	Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
ii.	Any problems with the equipment or emission controls.
iii.	Certified copies of fuel deliveries for the time period that identify:
1.	Source of supply
2.	Quantity of fuel
3.	Quality of fuel, including sulfur content (percent by weight)

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction and operation. An updated EIR should be prepared to include all feasible mitigation measures, as well as include an updated health risk and GHG analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. 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.

2-14 Cont.

Sincerely,

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

Paul E. Rosenfeld, Ph.D.

Attachment A:	SWAPE Health Risk Calculations
Attachment B:	SWAPE GHG and VMT Calculations
Attachment C:	SWAPE Project CalEEMod Modeling
Attachment D:	SWAPE Project AERSCREEN Modeling
Attachment E:	Paul Rosenfeld CV
Attachment F:	Matt Hagemann CV

Attachment A

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.0437
Daily Emissions (lbs/day)	0.239452055
Emission Rate (g/s)	0.00126
Release Height (meters)	3
Initial Vertical Dimension (meters)	1.5
Max Horizontal (meters)	256.0
Min Horizontal (meters)	101.0
Total Acreage	6.389151095
Setting	Urban
Population	16,731
Total Pounds of DPM	
Total DPM (lbs)	87.4

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (ug/m3)	Breathing Rate (L/kg-day)	ASF	Cancer Risk with ASFs*
Total Construction	**2.83**				**4.2E-06**
Operation	13.42	0.1937	572	3	6.7E-05
Child Exposure Duration	***13.42***			***Child Exposure***	***6.7E-05***
Operation	14.00	0.1937	261	1	7.8E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***7.8E-06***
Lifetime Exposure Duration	**30.25**			**Lifetime Exposure**	**7.9E-05**

2-14 Cont.

Attachment B

GHG CALCULATIONS: SWAPE Modeling

Line (L)	Value	Unit
Total Emissions From Passenger and Light Duty Vehicles		
1	2,553.25	Mobile Emissions (MT CO2e/year)
2	91.23%	Passenger and Light-Duty VMT Fleet Mix
3	2,329.20	Passenger and Light Duty Vehicle Emissions (MT CO2e/year) (Calc: (L1*L2))
4	14,068.52	Passenger and Light-Duty Vehicle Emissions (Total lbs CO2e/day) (Calc: (L3 converted into lbs) / (365 days))
5	674	Service Population (618 residents + 56 long-term jobs)
6	20.87	Per Service Population Emissions (lbs CO2e/day/SP) (Calc: (L4/L5))
Daily VMT Per Capita From Passenger and Light Duty Vehicles		
7	6,508,735	Project Total VMT (CalEEMod Annual Output, Tbl. 4.2 Trip Summary)
8	91.23%	Passenger and Light-Duty VMT Fleet Mix (see L2)
9	5,937,594	VMT from Passenger & Light-Duty Vehicles
10	16,267	Daily VMT from Passenger & Light-Duty Vehicles (Calc: (L9/365))
11	674	Service Population (618 residents + 56 long-term jobs)
12	24.14	Daily VMT Per Capita ((Calc: L10/L11))

CO_2e Per Capita Emissions from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Goals	
Sources	**Project**
	SWAPE Modeling
Annual Mobile Emissions (MT CO_2e/year)	2,553.25
Passenger & Light-Duty Fleet Mix (%)	91.23%
Daily CO_2e Emissions (lbs/day)	14,068.52
Service Population	674
Per Capita Emissions (lbs/day)	**20.87**
18.8 lbs/day/SP (2035 Goal) Exceeded?	Yes

2-14 Cont.

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under RTP/SCS Performance-Based SB 375 Target	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2020 RTP/SCS Benchmarks, SCAG-Wide	
23.2 VMT (2016 Baseline) Exceed?	Yes
20.7 VMT (2045 Target) Exceed?	Yes
2020 RTP/SCS Benchmarks, Los Angeles County	
22.2 VMT (2016 Baseline) Exceed?	Yes
19.2 VMT (2045 Target) Exceed?	Yes

2017 Scoping Plan Daily VMT Per Capita						
	Los Angeles County			State		
Year	Population	LDV VMT Baseline	VMT Per Capita	Population	LDV VMT Baseline	VMT Per Capita
2010	9,838,771	216,979,221.64	22.05	37,335,085	836,463,980.46	22.40
2025	10,671,800	217,340,094.90	20.37	42,326,397	929,443,512.65	21.96
2030	10,868,614	215,539,586.12	19.83	43,939,250	957,178,153.19	21.78

Daily VMT Per Capita from Passenger & Light-Duty Trucks, Exceedances under 2017 Scoping Plan Performance-Based SB 375 Benchmarks	
Sources	Project SWAPE Modeling
Annual VMT from Auto & Light-Duty Vehicles	5,937,594
Daily VMT from Auto & Light-Duty Vehicles	16,267
Service Population	674
Daily VMT Per Capita	24.14
2017 Scoping Plan Benchmarks, Statewide	
22.40 VMT (2010 Baseline) Exceed?	Yes
21.96 VMT (2025 Projected) Exceed?	Yes
21.78 VMT (2030 Projected) Exceed?	Yes
2017 Scoping Plan Benchmarks, Los Angeles County Specific	
22.05 VMT (2010 Baseline) Exceed?	Yes
20.37 VMT (2025 Projected) Exceed?	Yes
19.83 VMT (2030 Projected) Exceed?	Yes

2-14 Cont.

Attachment C

Pacific Coast Commons Specific Plan Project

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	318,800.00	0
Other Asphalt Surfaces	12.65	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	4,957.00	0
Apartments Mid Rise	263.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.25	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	661.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.005

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	230.00	262.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,852.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.28	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.86	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.91
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	38.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NO_x	CO	SO2	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	0.1147	1.1622	0.7437	1.6700e-003	0.3952	0.0526	0.4477	0.1637	0.0485	0.2122	0.0000	150.2960	150.2960	0.0339	0.0000	151.1444
2022	1.3593	2.3980	2.6885	5.9700e-003	0.2647	0.1049	0.3696	0.0870	0.0983	0.1853	0.0000	532.1323	532.1323	0.0866	0.0000	534.2970
2023	0.3692	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	932.8981	932.8981	0.1113	0.0000	935.6806
2024	1.2711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3427	0.0765	0.0443	0.1208	0.0000	483.9751	483.9751	0.0547	0.0000	485.3423
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**932.8981**	**932.8981**	**0.1113**	**0.0000**	**935.6806**

2-14 Cont.

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	0.1147	1.1622	0.7436	1.6700e-003	0.0552	0.0526	0.0877	0.0337	0.0485	0.0722	0.0000	150.2959	150.2959	0.0039	0.0000	151.1442
2022	1.3593	2.9090	2.6886	5.9700e-003	0.2647	0.1049	0.3696	0.0970	0.0963	0.1061	0.0000	532.1320	532.1320	0.0866	0.0000	534.2956
2023	0.3502	2.9109	3.2200	9.1800e-003	0.7656	0.1075	0.8731	0.2899	0.1002	0.3901	0.0000	852.6977	852.6977	0.1113	0.0000	855.6802
2024	1.3711	1.3401	1.9799	5.3600e-003	0.2954	0.0473	0.3397	0.0765	0.0443	0.1208	0.0000	463.9749	463.9749	0.0547	0.0000	466.3431
Maximum	**1.3593**	**2.9109**	**3.2200**	**9.1800e-003**	**0.7656**	**0.1075**	**0.8731**	**0.2899**	**0.1002**	**0.3901**	**0.0000**	**852.6977**	**852.6977**	**0.1113**	**0.0000**	**855.6802**

	ROG	NOx	CO	SO2	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	10-1-2021	12-31-2021	1.2749	1.2749
2	1-1-2022	3-31-2022	0.7105	0.7105
3	4-1-2022	6-30-2022	0.6789	0.6789
4	7-1-2022	9-30-2022	0.6863	0.6863
5	10-1-2022	12-31-2022	1.6786	1.6786
6	1-1-2023	3-31-2023	0.9521	0.9521
7	4-1-2023	6-30-2023	0.8759	0.8759
8	7-1-2023	9-30-2023	0.7219	0.7219

2-14 Cont.

9	10-1-2023	12-31-2023	0.7269	0.7269
10	1-1-2024	3-31-2024	0.6806	0.6806
11	4-1-2024	6-30-2024	1.1803	1.1803
12	7-1-2024	9-30-2024	0.7515	0.7515
		Highest	1.5788	1.5788

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0277	3,791.432 4

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Energy	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	1,013.325 0	1,013.325 0	0.0325	0.0111	1,017.432 6
Mobile	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.6625	0.0186	0.6810	0.0000	2,550.393 7	2,550.393 7	0.1146	0.0000	2,553.247 8
Waste						0.0000	0.0000		0.0000	0.0000	38.0730	0.0000	38.0730	2.2501	0.0000	94.3242
Water						0.0000	0.0000		0.0000	0.0000	6.0845	95.4263	101.5108	0.6263	0.0166	121.8697
Total	2.0143	3.0176	9.4867	0.0288	2.4727	0.0501	2.5228	0.6625	0.0487	0.7112	44.1575	3,663.585 6	3,707.743 1	3.0298	0.0277	3,791.432 4

	ROG	NOx	CO	SO2	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

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40

2-14 Cont.

Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41
Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37

2-14 Cont.

Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	80.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	80.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	9	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	8	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

2-14 Cont.

3.2 Demolition - Phase 1 - 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					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

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	1.4900e-003	0.0529	0.0112	1.6000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1580	15.1580	1.0400e-003	0.0000	15.1839
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	4.0000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	3.5000e-003	2.5900e-003	0.0293	9.0000e-005	3.2200e-003	7.0000e-005	3.2900e-003	2.4600e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.9000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5000e-003**	**0.0000**	**28.3521**

2-14 Cont.

l.2 Demolition - Phase 1 - 2021

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					0.0440	0.0000	0.0440	6.6800e-003	0.0000	6.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0332	0.3301	0.2264	4.1000e-004		0.0163	0.0163		0.0151	0.0151	0.0000	35.7008	35.7008	0.0101	0.0000	35.9520
Total	**0.0332**	**0.3301**	**0.2264**	**4.1000e-004**	**0.0440**	**0.0163**	**0.0603**	**6.6600e-003**	**0.0151**	**0.0218**	**0.0000**	**35.7008**	**35.7008**	**0.0101**	**0.0000**	**35.9520**

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	1.4900e-007	0.0529	0.0112	1.5000e-004	3.4900e-003	1.6000e-004	3.6500e-003	9.6000e-004	1.5000e-004	1.1100e-003	0.0000	15.1580	15.1580	7.0400e-003	0.0000	15.1699
Vendor	6.0000e-004	0.0203	5.0400e-003	5.0000e-005	1.3200e-003	4.0000e-005	1.3600e-003	3.8000e-004	3.9000e-005	4.2000e-004	0.0000	5.1271	5.1271	3.2000e-004	0.0000	5.1352
Worker	5.5800e-003	2.5800e-003	0.0293	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	8.0275	8.0275	2.2000e-004	0.0000	8.0329
Total	**5.5900e-003**	**0.0758**	**0.0455**	**2.5000e-004**	**0.0140**	**2.7000e-004**	**0.0143**	**3.7900e-003**	**2.5000e-004**	**4.0400e-003**	**0.0000**	**28.3126**	**28.3126**	**1.5800e-003**	**0.0000**	**28.3521**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 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										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7793	36.7793	0.0119	0.0000	37.0767
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7793**	**36.7793**	**0.0119**	**0.0000**	**37.0767**

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										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	3.1000e-004	0.0106	2.6400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.9300e-003	0.0192	6.0000e-005	5.0300e-003	5.0000e-005	5.0800e-003	1.5000e-003	4.0000e-005	1.5400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0218**	**9.0000e-005**	**5.7200e-003**	**7.0000e-005**	**5.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 2021

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					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0428	0.4455	0.2327	4.2000e-004		0.0225	0.0225		0.0207	0.0207	0.0000	36.7792	36.7792	0.0119	0.0000	37.0766
Total	**0.0428**	**0.4455**	**0.2327**	**4.2000e-004**	**0.1987**	**0.0225**	**0.2212**	**0.1092**	**0.0207**	**0.1299**	**0.0000**	**36.7792**	**36.7792**	**0.0119**	**0.0000**	**37.0766**

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	3.1000e-004	0.0106	2.8400e-003	3.0000e-005	6.9000e-004	2.0000e-005	7.1000e-004	2.0000e-004	2.0000e-005	2.2000e-004	0.0000	2.6856	2.6856	1.7000e-004	0.0000	2.6899
Worker	2.2900e-003	1.6900e-003	0.0192	6.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6000e-003	4.0000e-005	1.6400e-003	0.0000	5.2561	5.2561	1.4000e-004	0.0000	5.2597
Total	**2.6000e-003**	**0.0123**	**0.0219**	**9.0000e-005**	**6.7200e-003**	**7.0000e-005**	**6.7900e-003**	**1.8000e-003**	**6.0000e-005**	**1.8600e-003**	**0.0000**	**7.9417**	**7.9417**	**3.1000e-004**	**0.0000**	**7.9495**

2-14 Cont.

3.4 Grading - Phase 1 - 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					0.0909	0.0000	0.0909	0.0393	0.0000	0.0393	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1624	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9618	29.9618	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1624**	**3.4000e-004**	**0.0909**	**0.0133**	**0.0943**	**0.0393**	**0.0123**	**0.0516**	**0.0000**	**29.9618**	**29.9618**	**9.6900e-003**	**0.0000**	**30.2040**

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	3.3000e-004	0.0111	2.7600e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.8000e-004	0.0000	2.8121
Worker	3.8300e-003	2.8300e-003	0.0321	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0348**	**1.3000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.8900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 2021

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					0.0809	0.0000	0.0809	0.0395	0.0000	0.0395	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0263	0.2845	0.1824	3.4000e-004		0.0133	0.0133		0.0123	0.0123	0.0000	29.9617	29.9617	9.6900e-003	0.0000	30.2040
Total	**0.0263**	**0.2845**	**0.1824**	**3.4000e-004**	**0.0809**	**0.0133**	**0.0943**	**0.0395**	**0.0123**	**0.0518**	**0.0000**	**29.9617**	**29.9617**	**9.6900e-003**	**0.0000**	**30.2040**

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	3.5000e-004	0.0111	2.7800e-003	3.0000e-005	7.2000e-004	2.0000e-005	7.5000e-004	2.1000e-004	2.0000e-005	2.3000e-004	0.0000	2.8077	2.8077	1.0000e-004	0.0000	2.8121
Worker	3.8200e-003	2.9800e-003	0.0521	1.0000e-004	0.0101	9.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7921	8.7921	2.4000e-004	0.0000	8.7980
Total	**4.1600e-003**	**0.0140**	**0.0340**	**1.3000e-004**	**0.0108**	**1.1000e-004**	**0.0109**	**2.0900e-003**	**9.0000e-005**	**2.9800e-003**	**0.0000**	**11.5998**	**11.5998**	**4.2000e-004**	**0.0000**	**11.6101**

2-14 Cont.

3.4 Grading - Phase 1 - 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					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1604	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1604**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3800e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3460e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2900e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7446
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

2-14 Cont.

3.4 Grading - Phase 1 - 2022

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										MT/yr					
Fugitive Dust					0.0749	0.0000	0.0749	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0205	0.2190	0.1684	3.1000e-004		9.8800e-003	9.8800e-003		9.0900e-003	9.0900e-003	0.0000	27.3575	27.3575	8.8500e-003	0.0000	27.5787
Total	**0.0205**	**0.2190**	**0.1684**	**3.1000e-004**	**0.0749**	**9.8800e-003**	**0.0848**	**0.0360**	**9.0900e-003**	**0.0451**	**0.0000**	**27.3575**	**27.3575**	**8.8500e-003**	**0.0000**	**27.5787**

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										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6000e-004	9.6300e-003	2.3600e-003	3.0000e-005	6.6000e-004	2.0000e-005	6.8000e-004	1.9000e-004	2.0000e-005	2.1000e-004	0.0000	2.5410	2.5410	1.6000e-004	0.0000	2.5449
Worker	3.2900e-003	2.3400e-003	0.0270	9.0000e-005	9.2200e-003	7.0000e-005	9.2800e-003	2.4500e-003	6.0000e-005	2.5100e-003	0.0000	7.7397	7.7397	1.9000e-004	0.0000	7.7445
Total	**3.5700e-003**	**0.0120**	**0.0294**	**1.2000e-004**	**9.8800e-003**	**9.0000e-005**	**9.9600e-003**	**2.6400e-003**	**8.0000e-005**	**2.7200e-003**	**0.0000**	**10.2807**	**10.2807**	**3.5000e-004**	**0.0000**	**10.2895**

2-14 Cont.

3.5 Building Construction - Phase 1 - 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	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853
Total	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9321	225.9321	0.0541	0.0000	227.2853

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	7.8000e-003	0.2694	0.0653	7.3000e-004	0.0104	4.5000e-004	0.0109	5.3200e-003	4.7000e-004	5.7900e-003	0.0000	70.7841	70.7841	4.5500e-003	0.0000	70.8529
Worker	0.0458	0.0326	0.3765	1.1900e-003	0.1264	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.0034	107.0034	2.7100e-003	0.0000	107.0712
Total	0.0536	0.3020	0.4418	1.9200e-003	0.1368	1.4300e-003	0.1402	0.0394	1.3300e-003	0.0407	0.0000	177.7875	177.7875	7.2600e-003	0.0000	177.9239

2-14 Cont.

3.5 Building Construction - Phase 1 - 2022

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	0.1664	1.5225	1.5954	2.6300e-003		0.0789	0.0789		0.0742	0.0742	0.0000	225.9318	225.9318	0.0541	0.0000	227.2850
Total	**0.1664**	**1.5225**	**1.5954**	**2.6300e-003**		**0.0789**	**0.0789**		**0.0742**	**0.0742**	**0.0000**	**225.9318**	**225.9318**	**0.0541**	**0.0000**	**227.2850**

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	7.6000e-003	0.2684	0.0663	7.3000e-004	0.0104	4.9000e-004	0.0109	6.3200e-003	4.7000e-004	6.7900e-003	0.0000	70.7041	70.7041	4.3500e-003	0.0000	70.8928
Worker	0.0458	0.0539	0.3765	1.1900e-003	0.1284	9.4000e-004	0.1293	0.0341	8.6000e-004	0.0350	0.0000	107.8034	107.8034	2.7100e-003	0.0000	107.8712
Total	**0.0536**	**0.3089**	**0.4428**	**1.9200e-003**	**0.1468**	**1.4300e-003**	**0.1402**	**0.0394**	**1.3300e-003**	**0.0407**	**0.0000**	**178.5875**	**178.5875**	**7.0600e-003**	**0.0000**	**178.7639**

2-14 Cont.

3.6 Paving - Phase 1 - 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										MT/yr					
Off-Road	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4169**

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										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	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3500e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	9.6500e-003	7.0000e-005	9.7200e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	7.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

2-14 Cont.

3.6 Paving - Phase 1 - 2022

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	0.0243	0.2448	0.3208	5.0000e-004		0.0125	0.0125		0.0115	0.0115	0.0000	44.0606	44.0606	0.0143	0.0000	44.4158
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0243**	**0.2448**	**0.3208**	**5.0000e-004**		**0.0125**	**0.0125**		**0.0115**	**0.0115**	**0.0000**	**44.0606**	**44.0606**	**0.0143**	**0.0000**	**44.4158**

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	5.9000e-004	0.0202	4.9900e-003	5.0000e-005	1.3900e-003	4.0000e-005	1.4200e-003	4.0000e-004	4.0000e-005	4.4000e-004	0.0000	5.3239	5.3239	3.3000e-004	0.0000	5.3321
Worker	3.4400e-003	2.4500e-003	0.0283	9.0000e-005	3.6500e-003	7.0000e-005	3.7300e-003	2.5600e-003	6.0000e-005	2.6300e-003	0.0000	8.1083	8.1083	2.0000e-004	0.0000	8.1134
Total	**4.0300e-003**	**0.0226**	**0.0333**	**1.4000e-004**	**0.0110**	**1.1000e-004**	**0.0112**	**2.9600e-003**	**1.0000e-004**	**3.0700e-003**	**0.0000**	**13.4322**	**13.4322**	**5.3000e-004**	**0.0000**	**13.4455**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 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										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

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										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0986**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 2022

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										MT/yr					
Archit. Coating	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-003	0.0310	0.0399	7.0000e-005		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	5.6172	5.6172	3.7000e-004	0.0000	5.6263
Total	**1.0789**	**0.0310**	**0.0399**	**7.0000e-005**		**1.8000e-003**	**1.8000e-003**		**1.8000e-003**	**1.8000e-003**	**0.0000**	**5.6172**	**5.6172**	**3.7000e-004**	**0.0000**	**5.6263**

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										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1700e-003	0.0404	9.9800e-003	1.1000e-004	2.7700e-003	7.0000e-005	2.8500e-003	8.0000e-004	7.0000e-005	8.7000e-004	0.0000	10.6479	10.6479	6.5000e-004	0.0000	10.6642
Worker	6.8900e-003	4.9000e-003	0.0586	1.8000e-004	0.0193	1.4000e-004	0.0195	5.1300e-003	1.3000e-004	5.2600e-003	0.0000	16.2166	16.2166	4.1000e-004	0.0000	16.2269
Total	**8.0600e-003**	**0.0453**	**0.0686**	**2.9000e-004**	**0.0221**	**2.1000e-004**	**0.0223**	**5.9300e-003**	**2.0000e-004**	**6.1300e-003**	**0.0000**	**26.8645**	**26.8645**	**1.0600e-003**	**0.0000**	**26.8910**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 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	lbs/day										MT/yr					
Fugitive Dust					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8831
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8831**

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										MT/yr					
Hauling	9.4000e-004	0.0314	0.0100	1.6000e-004	3.4900e-003	6.0000e-005	3.5500e-003	9.6000e-004	6.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2500e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0523	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	10.5277	10.5277	4.4000e-004	0.0000	10.5387
Total	**0.0104**	**0.0947**	**0.0794**	**5.6000e-004**	**0.0318**	**2.9000e-004**	**0.0321**	**8.6100e-003**	**2.7000e-004**	**8.8700e-003**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 2023

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					0.0440	0.0000	0.0440	6.6600e-003	0.0000	6.6600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0477	0.4512	0.4125	8.2000e-004		0.0210	0.0210		0.0195	0.0195	0.0000	71.3833	71.3833	0.0200	0.0000	71.8830
Total	**0.0477**	**0.4512**	**0.4125**	**8.2000e-004**	**0.0440**	**0.0210**	**0.0649**	**6.6600e-003**	**0.0195**	**0.0262**	**0.0000**	**71.3833**	**71.3833**	**0.0200**	**0.0000**	**71.8830**

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	9.4000e-004	0.0314	0.0100	1.5000e-004	5.4900e-003	8.0000e-005	5.5700e-003	3.6000e-004	8.0000e-005	1.0100e-003	0.0000	14.3849	14.3849	9.3000e-004	0.0000	14.4082
Vendor	1.6700e-003	0.0580	0.0170	2.0000e-004	5.2900e-003	7.0000e-005	5.3600e-003	1.5300e-003	6.0000e-005	1.5900e-003	0.0000	19.7150	19.7150	1.0900e-003	0.0000	19.7421
Worker	7.7400e-003	5.2900e-003	0.0623	2.1000e-004	0.0230	1.5000e-004	0.0232	6.1200e-003	1.5000e-004	6.2700e-003	0.0000	18.6277	18.6277	4.1000e-004	0.0000	18.6387
Total	**0.0104**	**0.0947**	**0.0894**	**5.6000e-004**	**0.0319**	**2.9000e-004**	**0.0321**	**0.0100**	**2.7000e-004**	**0.0180**	**0.0000**	**52.7276**	**52.7276**	**2.4600e-003**	**0.0000**	**52.7890**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7958	36.7958	0.0119	0.0000	37.0933
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7958**	**36.7958**	**0.0119**	**0.0000**	**37.0933**

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	4.4000e-004	0.0152	4.4800e-003	6.0000e-005	1.3900e-003	2.6000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.6000e-004	0.0000	5.1705
Worker	4.8800e-003	5.3200e-003	0.0382	1.3000e-004	0.0145	1.0000e-004	0.0146	3.9500e-003	9.0000e-005	3.9400e-002	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0205**	**0.0426**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.2000e-004**	**0.0000**	**16.8863**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 2023

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					0.1987	0.0000	0.1987	0.1092	0.0000	0.1092	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0293	0.3028	0.2007	4.2000e-004		0.0139	0.0139		0.0128	0.0128	0.0000	36.7957	36.7957	0.0119	0.0000	37.0932
Total	**0.0293**	**0.3028**	**0.2007**	**4.2000e-004**	**0.1987**	**0.0139**	**0.2127**	**0.1092**	**0.0128**	**0.1221**	**0.0000**	**36.7957**	**36.7957**	**0.0119**	**0.0000**	**37.0932**

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	4.4000e-004	0.0162	4.4600e-003	5.0000e-005	1.3900e-003	2.0000e-005	1.4000e-003	4.0000e-004	2.0000e-005	4.2000e-004	0.0000	5.1635	5.1635	2.9000e-004	0.0000	5.1709
Worker	4.8600e-003	3.2200e-003	0.0392	1.3000e-004	0.0145	1.0000e-004	0.0146	3.8500e-003	9.0000e-005	3.9400e-003	0.0000	11.7089	11.7089	2.6000e-004	0.0000	11.7157
Total	**5.3000e-003**	**0.0195**	**0.0436**	**1.8000e-004**	**0.0159**	**1.2000e-004**	**0.0160**	**4.2500e-003**	**1.1000e-004**	**4.3600e-003**	**0.0000**	**16.8723**	**16.8723**	**5.5000e-004**	**0.0000**	**16.8863**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7273	54.7273	0.0177	0.0000	55.1690
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0858**	**0.0000**	**54.7273**	**54.7273**	**0.0177**	**0.0000**	**55.1690**

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	4.9000e-003	0.1642	0.0524	7.6000e-004	0.0183	3.0000e-004	0.0186	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	8.9800e-003	0.0000	75.4125
Vendor	8.4000e-004	0.0230	8.5100e-003	1.0000e-004	2.8500e-003	3.0000e-005	2.8800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0897	3.3000e-004	0.0369	2.5000e-004	0.0371	9.7900e-003	2.4000e-004	0.0100	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 2023

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					0.1386	0.0000	0.1386	0.0709	0.0000	0.0709	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0359	0.3767	0.3098	6.2000e-004		0.0163	0.0163		0.0150	0.0150	0.0000	54.7272	54.7272	0.0177	0.0000	55.1697
Total	**0.0359**	**0.3767**	**0.3098**	**6.2000e-004**	**0.1386**	**0.0163**	**0.1548**	**0.0709**	**0.0150**	**0.0859**	**0.0000**	**54.7272**	**54.7272**	**0.0177**	**0.0000**	**55.1697**

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	4.9000e-003	0.1642	0.0524	7.8000e-004	0.0163	3.0000e-004	0.0166	5.0100e-003	2.9000e-004	5.3000e-003	0.0000	75.2902	75.2902	4.0900e-005	0.0000	75.4125
Vendor	8.4000e-004	0.0250	9.5100e-003	1.0000e-004	2.6500e-003	3.0000e-005	2.6800e-003	7.6000e-004	3.0000e-005	8.0000e-004	0.0000	9.8575	9.8575	5.4000e-004	0.0000	9.8711
Worker	0.0124	8.4600e-003	0.0497	3.3000e-004	0.0369	2.6000e-004	0.0371	9.7900e-003	2.4000e-004	0.0100	0.0000	29.6044	29.6044	7.0000e-004	0.0000	29.6219
Total	**0.0181**	**0.2017**	**0.1606**	**1.1900e-003**	**0.0578**	**5.9000e-004**	**0.0584**	**0.0156**	**5.6000e-004**	**0.0161**	**0.0000**	**114.9521**	**114.9521**	**6.1300e-003**	**0.0000**	**115.1055**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193
Total	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1716	176.1716	0.0419	0.0000	177.2193

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0824	1.1000e-003	0.0267	3.6000e-004	0.0291	8.2900e-003	3.4000e-004	8.6400e-003	0.0000	107.0244	107.0244	5.6900e-003	0.0000	107.1718
Worker	0.0040	0.0574	0.0764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	0.0131	0.3722	0.7689	3.3400e-003	0.2769	2.1300e-003	0.2810	0.0747	1.9700e-003	0.0767	0.0000	309.2681	309.2681	0.0107	0.0000	309.5343

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2023

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	0.1195	1.0933	1.2345	2.0500e-003		0.0532	0.0532		0.0500	0.0500	0.0000	176.1714	176.1714	0.0419	0.0000	177.2191
Total	**0.1195**	**1.0933**	**1.2345**	**2.0500e-003**		**0.0532**	**0.0532**		**0.0500**	**0.0500**	**0.0000**	**176.1714**	**176.1714**	**0.0419**	**0.0000**	**177.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0800e-003	0.3148	0.0924	1.1000e-003	0.0267	3.6000e-004	0.0291	6.2900e-003	3.4000e-004	6.6400e-003	0.0000	107.0244	107.0244	5.6800e-003	0.0000	107.1716
Worker	0.0840	0.0574	0.6764	2.2400e-003	0.2502	1.7700e-003	0.2519	0.0664	1.6300e-003	0.0681	0.0000	202.2438	202.2438	4.7600e-003	0.0000	202.3627
Total	**0.0931**	**0.3722**	**0.7689**	**3.3400e-003**	**0.2769**	**2.1300e-003**	**0.2810**	**0.0747**	**1.9700e-003**	**0.0767**	**0.0000**	**309.2681**	**309.2681**	**0.0107**	**0.0000**	**309.5343**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.0809	0.7394	0.8692	1.4600e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5170	127.5170	0.0302	0.0000	128.2709
Total	**0.0809**	**0.7394**	**0.8692**	**1.4600e-003**		**0.0337**	**0.0337**		**0.0317**	**0.0317**	**0.0000**	**127.5170**	**127.5170**	**0.0302**	**0.0000**	**128.2709**

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	6.4300e-003	0.2273	0.0650	7.4000e-004	0.0206	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1782	77.1782	4.1800e-003	0.0000	77.2831
Worker	0.0576	0.0378	0.4566	1.5600e-003	0.1810	1.2700e-003	0.1823	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	**0.0641**	**0.2651**	**0.5216**	**2.3000e-003**	**0.2016**	**1.5300e-003**	**0.2034**	**0.0541**	**1.4100e-003**	**0.0555**	**0.0000**	**218.7223**	**218.7223**	**7.3400e-003**	**0.0000**	**218.9060**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 2024

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	0.0809	0.7394	0.8950	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707
Total	0.0809	0.7394	0.8952	1.4800e-003		0.0337	0.0337		0.0317	0.0317	0.0000	127.5169	127.5169	0.0302	0.0000	128.2707

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	6.4300e-003	0.2273	0.0650	7.8000e-004	0.0208	2.6000e-004	0.0211	6.0000e-003	2.4000e-004	6.2500e-003	0.0000	77.1702	77.1702	4.1900e-003	0.0000	77.2751
Worker	0.0576	0.0378	0.4565	1.5600e-003	0.1610	1.2700e-003	0.1623	0.0481	1.1700e-003	0.0492	0.0000	141.5441	141.5441	3.1500e-003	0.0000	141.6229
Total	0.0641	0.2651	0.5216	2.3500e-003	0.2018	1.5300e-003	0.2034	0.0541	1.4100e-003	0.0555	0.0000	218.7223	218.7223	7.3400e-003	0.0000	218.9060

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 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										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4052
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4052**

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										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	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	8.1000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.3000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**8.8000e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 2024

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										MT/yr					
Off-Road	0.0213	0.2048	0.3145	4.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	43.0570	43.0570	0.0139	0.0000	43.4051
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0213**	**0.2048**	**0.3145**	**4.9000e-004**		**0.0101**	**0.0101**		**9.2700e-003**	**9.2700e-003**	**0.0000**	**43.0570**	**43.0570**	**0.0139**	**0.0000**	**43.4051**

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										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	8.4000e-004	0.0296	8.4600e-003	1.0000e-004	2.7100e-003	3.0000e-005	2.7400e-003	7.6000e-004	3.0000e-005	8.1000e-004	0.0000	10.0565	10.0565	5.5000e-004	0.0000	10.0702
Worker	6.0100e-003	3.9400e-003	0.0476	1.6200e-004	0.0189	1.3000e-004	0.0190	5.0100e-003	1.2000e-004	5.1300e-003	0.0000	14.7549	14.7549	3.9000e-004	0.0000	14.7631
Total	**6.8500e-003**	**0.0336**	**0.0561**	**2.6000e-004**	**0.0216**	**1.6000e-004**	**0.0217**	**5.7900e-003**	**1.5000e-004**	**5.9400e-003**	**0.0000**	**24.8115**	**24.8115**	**0.0009e-004**	**0.0000**	**24.8333**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4895	5.4895	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4895**	**5.4895**	**3.1000e-004**	**0.0000**	**5.4972**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0592	0.0189	2.1000e-004	5.4200e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0190	0.0118	0.1426	4.9000e-004	0.0956	4.6000e-004	0.0570	0.0160	4.3000e-004	0.0164	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2894
Total	**0.0197**	**0.0711**	**0.1587**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4298**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 2024

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	1.0744					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e-003	0.0262	0.0389	6.0000e-005		1.3100e-003	1.3100e-003		1.3100e-003	1.3100e-003	0.0000	5.4695	5.4695	3.1000e-004	0.0000	5.4972
Total	**1.0783**	**0.0262**	**0.0389**	**6.0000e-005**		**1.3100e-003**	**1.3100e-003**		**1.3100e-003**	**1.3100e-003**	**0.0000**	**5.4695**	**5.4695**	**3.1000e-004**	**0.0000**	**5.4972**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0092	0.0169	2.1000e-004	5.4300e-003	7.0000e-005	5.4900e-003	1.5600e-003	6.0000e-005	1.6300e-003	0.0000	20.1131	20.1131	1.0900e-003	0.0000	20.1404
Worker	0.0180	0.0118	0.1428	4.9000e-004	0.0566	4.0000e-004	0.0570	0.0150	3.6000e-004	0.0154	0.0000	44.2647	44.2647	9.9000e-004	0.0000	44.2886
Total	**0.0197**	**0.0211**	**0.1597**	**7.0000e-004**	**0.0620**	**4.7000e-004**	**0.0625**	**0.0166**	**4.2000e-004**	**0.0170**	**0.0000**	**64.3778**	**64.3778**	**2.0800e-003**	**0.0000**	**64.4290**

2-14 Cont.

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.8810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8
Unmitigated	0.5540	2.7968	6.6649	0.0275	2.4727	0.0200	2.4927	0.8625	0.0186	0.8810	0.0000	2,550.383 7	2,550.383 7	0.1146	0.0000	2,553.247 8

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.94	1,284.48	1325.52	4,601,434	4,601,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	880.51	1,478.02	1018.86	1,352,680	1,352,680
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,221	554,221
Total	2,516.61	3,069.10	2,515.00	6,508,735	6,508,735

4.3 Trip Type Information

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.40	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.80	8.40	6.90	9.50	72.50	18.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
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 Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005703	0.021875	0.035696	0.002143	0.001678	0.004899	0.000713	0.000925

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive 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	797.4761	797.4761	0.0284	7.1000e-003	800.3011
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	797.4761	797.4761	0.0284	7.1000e-003	800.3011
NaturalGas Mitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315
NaturalGas Unmitigated	0.0218	0.1894	0.1017	1.1900e-003		0.0151	0.0151		0.0151	0.0151	0.0000	215.8489	215.8489	4.1400e-003	3.9600e-003	217.1315

CalEEMod Version: CalEEMod.2016.3.2 Page 43 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	149.00	0.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7937
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 53 Date: 4/12/2021 9:31 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Annual

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 Mid Rise	3.00542e+006	0.0162	0.1385	0.0589	8.8000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.3808	160.3808	3.0700e-003	2.9400e-003	161.3338
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.02483e+006	5.5300e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003	0.0000	54.6890	54.6890	1.0500e-003	1.0000e-003	55.0140
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	149.00	0.0000e-005	7.2000e-004	6.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.7791	0.7791	1.0000e-005	1.0000e-005	0.7937
Total		**0.0218**	**0.1895**	**0.1017**	**1.1800e-003**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**215.8488**	**215.8488**	**4.1300e-003**	**3.9500e-003**	**217.1315**

2-14 Cont.

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.8564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2901	7.6000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.0455e+006	265.4096	9.4800e-003	2.2700e-003	267.3534
Enclosed Parking with Elevator	1.8564e+006	473.0500	0.0168	4.2100e-003	474.7258
High Turnover (Sit Down Restaurant)	144169	36.7364	1.3100e-003	3.3000e-004	36.8665
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	83512	21.2901	7.6000e-004	1.9000e-004	21.3555
Total		**797.4761**	**0.0284**	**7.1000e-003**	**800.3011**

2-14 Cont.

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Unmitigated	1.4385	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580

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	ton/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

2-14 Cont.

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	ton/yr										MT/yr					
Architectural Coating	0.1126					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2437					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0823	0.0313	2.7201	1.4000e-004		0.0151	0.0151		0.0151	0.0151	0.0000	4.4507	4.4507	4.3000e-003	0.0000	4.5580
Total	**1.4385**	**0.0313**	**2.7201**	**1.4000e-004**		**0.0151**	**0.0151**		**0.0151**	**0.0151**	**0.0000**	**4.4507**	**4.4507**	**4.3000e-003**	**0.0000**	**4.5580**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	101.5108	0.6283	0.0156	121.9697
Unmitigated	101.5108	0.6283	0.0156	121.9697

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560347 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

2-14 Cont.

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.1355 / 10.6028	92.8736	0.5615	0.0140	111.0712
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	1.560347 / 0.0959037	5.7334	0.0492	1.2000e-003	7.3204
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.540729 / 0.331416	2.9039	0.0177	4.4000e-004	3.4780
Total		**101.5108**	**0.6283**	**0.0156**	**121.9697**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	38.0730	2.2501	0.0000	94.3242
Unmitigated	38.0730	2.2501	0.0000	94.3242

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.86	24.5574	1.4513	0.0000	60.8410
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.67	1.5574	0.0920	0.0000	3.8573
Total		**38.0730**	**2.2501**	**0.0000**	**94.3242**

2-14 Cont.

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	120.98	24.5579	1.4513	0.0000	60.8418
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	58.91	11.9582	0.7067	0.0000	29.6259
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.87	1.5889	0.0939	0.0000	3.8673
Total		38.0730	2.2501	0.0000	94.3742

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2-14 Cont.

Pacific Coast Commons Specific Plan Project
South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	216,800.00	0
Other Asphalt Surfaces	12.66	1000sqft	0.00	12,660.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	9,952.00	0
Apartments Mid Rise	263.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblConstructionPhase	NumDays	230.00	195.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	26.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,952.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	60.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	19.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	298.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.08	5.04
tblVehicleTrips	SU_TR	191.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	6.65	5.18
tblVehicleTrips	WD_TR	127.15	179.90
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	26.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0677	19.5366	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5366**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

2-14 Cont.

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	4.1271	41.5877	26.0688	0.0676	18.6891	2.0505	20.7396	10.0973	1.8865	11.9839	0.0000	6,762.521 0	6,762.521 0	1.2234	0.0000	6,812.987 9
2022	50.6883	21.9583	21.2160	0.0474	7.5106	0.9489	8.4595	3.6231	0.8731	4.4961	0.0000	4,645.779 7	4,645.779 7	0.9663	0.0000	4,663.075 6
2023	3.1451	29.1616	27.0612	0.0677	19.5366	1.2769	20.8125	10.3233	1.1748	11.4981	0.0000	9,024.161 9	9,024.161 9	1.2494	0.0000	9,055.377 7
2024	52.3840	18.1519	27.1750	0.0723	3.9608	0.6409	4.5194	1.0592	0.6025	1.6023	0.0000	7,235.973 5	7,235.973 5	0.8828	0.0000	7,258.041 9
Maximum	**52.3840**	**41.5877**	**27.1750**	**0.0877**	**19.5366**	**2.0505**	**20.8125**	**10.3233**	**1.8865**	**11.9839**	**0.0000**	**9,024.161 9**	**9,024.161 9**	**1.2494**	**0.0000**	**9,055.377 7**

	NOG	NOx	CO	SO2	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

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	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.642 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	**12.5742**	**22.8867**	**67.6728**	**0.2109**	**15.5725**	**0.6456**	**16.2161**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

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	6.5499	4.1819	23.4934	0.0263		0.4364	0.4364		0.4364	0.4364	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.642 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	5.9048	17.6188	43.8820	0.1781	15.5725	0.1246	15.6971	4.1658	0.1157	4.2815		19,192.40 41	19,192.40 41	0.7958		19,212.30 01
Total	**12.5742**	**22.8867**	**67.6728**	**0.2109**	**15.5725**	**0.6456**	**16.2161**	**4.1658**	**0.6367**	**4.8025**	**0.0000**	**24,554.21 61**	**24,554.21 61**	**0.9549**	**0.1159**	**24,612.63 09**

2-14 Cont.

	ROG	NOx	CO	SO2	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 - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	195	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	2/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	3/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	6/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

2-14 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

2-14 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	6	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

2-14 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 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					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 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	0.1403	4.6911	1.0364	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,503.775 6	1,503.775 6	0.1070		1,506.451 4
Vendor	0.0557	1.9875	0.4527	5.1000e-003	0.1289	3.8400e-003	0.1327	0.0368	3.6700e-003	0.0405		544.9769	544.9769	0.0309		545.7508
Worker	0.3377	0.2190	3.0138	8.8900e-003	0.8842	5.5800e-003	0.8898	0.2372	5.0800e-003	0.2422		885.0227	885.0227	0.0238		885.5182
Total	**0.5336**	**7.0976**	**4.5018**	**0.0288**	**1.3600**	**0.0256**	**1.3856**	**0.3666**	**0.0242**	**0.3908**		**3,034.576 1**	**3,034.576 1**	**0.1638**		**3,038.678 8**

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					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0386		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**	**0.0386**	**4.1873**	**1.5513**	**5.7386**	**0.6340**	**1.4411**	**2.0751**	**0.0000**	**3,747.944 9**	**3,747.944 9**	**1.0549**		**3,774.317 4**

2-14 Cont.

3.2 Demolition - Phase 1 - 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	0.1403	4.8911	1.0354	0.0148	0.3378	0.0152	0.3530	0.0926	0.0145	0.1071		1,603.775 5	1,603.775 5	0.1070		1,606.451 4
Vendor	0.0667	1.9075	0.4627	5.1000e-003	0.1260	3.8400e-003	0.1318	0.0368	3.6700e-003	0.0406		544.6769	544.6769	0.0330		545.7009
Worker	0.3377	0.2190	3.0136	6.8900e-003	0.8042	6.5300e-003	0.8008	0.2372	6.0800e-003	0.2432		885.9227	885.9227	0.0238		886.5162
Total	0.5336	7.0176	4.5038	0.0288	1.2680	0.0256	1.2856	0.3666	0.0242	0.3908		3,034.576 1	3,034.576 1	0.1638		3,038.670 6

3.3 Site Preparation - Phase 1 - 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.0882	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	3.0882	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

2-14 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	0.2389	1.0906	2.1100	8.1100e-003	0.6229	6.0300e-003	0.6289	0.1647	5.6300e-003	0.1703		826.1401	826.1401	0.0314		826.9244

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	3,685.656 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	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0164	1.8400e-003	0.0183		272.4385	272.4385	0.0165		272.8505
Worker	0.2111	0.1368	1.8836	5.5600e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		553.7017	553.7017	0.0149		554.0739
Total	**0.2389**	**1.0906**	**2.1100**	**8.1100e-003**	**0.6229**	**6.0300e-003**	**0.6289**	**0.1647**	**5.6300e-003**	**0.1703**		**826.1401**	**826.1401**	**0.0314**		**826.9244**

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0278	0.9538	0.2263	2.5500e-003	0.0640	1.9200e-003	0.0659	0.0184	1.8400e-003	0.0203		272.4385	272.4385	0.0165		272.8505
Worker	0.3377	0.2190	3.0138	8.6800e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0236		886.5192
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9582**	**8.5000e-003**	**0.9667**	**0.2556**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.369 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9288**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0270	0.9538	0.2263	2.5500e-003	0.0548	1.9200e-003	0.0568	0.0184	1.8400e-003	0.0203		272.4385	272.4385	0.0105		272.6505
Worker	0.3377	0.2190	3.0136	8.8900e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		886.9227	886.9227	0.0298		886.5182
Total	**0.3655**	**1.1728**	**3.2401**	**0.0114**	**0.9502**	**8.5000e-003**	**0.9577**	**0.2556**	**7.9000e-003**	**0.2635**		**1,159.361 1**	**1,159.361 1**	**0.0403**		**1,159.368 7**

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	**1.9486**	**20.8551**	**15.2727**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**		**2,872.046 4**	**2,872.046 4**	**0.9289**		**2,895.268 4**

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0261	0.9063	0.2139	2.5300e-003	0.0640	1.8600e-003	0.0657	0.0164	1.7800e-003	0.0182		270.0591	270.0591	0.0159		270.4568
Worker	0.3168	0.1970	2.7760	8.4700e-003	0.8842	6.3900e-003	0.8906	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	0.3429	1.1032	3.0007	0.0111	0.9482	8.0500e-003	0.9563	0.2556	7.4600e-003	0.2631		1,124.238 3	1,124.238 3	0.0374		1,125.173 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0251	0.9053	0.2139	2.5300e-003	0.0640	1.6600e-003	0.0657	0.0164	1.5900e-003	0.0180		270.0891	270.0891	0.0159		270.4858
Worker	0.3178	0.1979	2.7868	8.5700e-003	0.8942	6.3900e-003	0.9006	0.2372	5.8900e-003	0.2430		864.1791	864.1791	0.0215		864.7174
Total	**0.3429**	**1.1032**	**3.0007**	**0.0111**	**0.9582**	**0.0080**	**0.9663**	**0.2536**	**7.4800e-003**	**0.2611**		**1,134,268.3**	**1,134,268.3**	**0.0374**		**1,135,173.2**

3.5 Building Construction - Phase 1 - 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		2,554.333 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**		**2,554.333 6**	**2,554.333 6**	**0.6120**		**2,569.632 2**

2-14 Cont.

3.5 Building Construction - Phase 1 - 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	0.0703	2.7160	0.6417	7.5900e-003	0.1926	4.9800e-003	0.1976	0.0553	4.7700e-003	0.0601		810.1774	810.1774	0.0476		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9200e-003	0.3646		1,281.269 7	1,281.269 7	0.0323		1,282.078 1
Total	0.5454	3.0128	4.8219	0.0204	1.5339	0.0146	1.5479	0.4110	0.0136	0.4246		2,091.446 1	2,091.446 1	0.0799		2,093.443 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

2-14 Cont.

3.5 Building Construction - Phase 1 - 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	0.0783	2.7160	0.6417	7.5800e-003	0.1920	4.9800e-003	0.1970	0.0563	4.7700e-003	0.0601		810.1774	810.1774	0.0479		811.3673
Worker	0.4751	0.2988	4.1802	0.0129	1.3413	9.6900e-003	1.3509	0.3557	8.9300e-003	0.3646		1,281.268 7	1,281.268 7	0.0323		1,282.076 1
Total	**0.5534**	**3.0120**	**4.8219**	**0.0204**	**1.5333**	**0.0146**	**1.5479**	**0.4119**	**0.0136**	**0.4246**		**2,091.446 1**	**2,091.446 1**	**0.0799**		**2,093.443 4**

3.6 Paving - Phase 1 - 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	1.1028	11.1249	14.5805	0.0226		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0226**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

2-14 Cont.

3.6 Paving - Phase 1 - 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	0.0261	0.9853	0.2139	2.5300e-003	0.0640	1.6800e-003	0.0657	0.0164	1.5500e-003	0.0200		270.8591	270.8591	0.0159		271.4566
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	0.1845	1.0843	1.6073	6.8200e-003	0.5111	4.8600e-003	0.5160	0.1370	4.5300e-003	0.1415		697.1487	697.1487	0.0266		697.8153

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

2-14 Cont.

3.6 Paving - Phase 1 - 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	0.0261	0.9053	0.2139	2.5300e-003	0.0648	1.8600e-003	0.0667	0.0184	1.5900e-003	0.0200		270.0691	270.0691	0.0159		270.4660
Worker	0.1584	0.0989	1.3934	4.2900e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		427.0896	427.0896	0.0108		427.3587
Total	**0.1845**	**1.0043**	**1.6073**	**6.8200e-003**	**0.5111**	**5.0600e-003**	**0.5169**	**0.1370**	**4.5300e-003**	**0.1415**		**697.1587**	**697.1587**	**0.0266**		**698.1145**

3.7 Architectural Coating - Phase 1 - 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					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4089	1.9136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	**49.0421**	**1.4089**	**1.9136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0103**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0527	1.8107	0.4278	5.9600e-003	0.1288	3.9300e-003	0.1313	0.0368	3.7800e-003	0.0406		540.1183	540.1183	0.0317		540.9115
Worker	0.3163	0.1978	2.7868	8.7700e-003	0.8842	6.3600e-003	0.8906	0.2372	5.8600e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0085**	**3.2146**	**0.0136**	**1.0222**	**9.7200e-003**	**1.0319**	**0.2740**	**9.6700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

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	48.6375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2046	1.4085	1.6136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**48.8421**	**1.4085**	**1.6136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0522	1.6187	0.4278	6.0600e-003	0.1288	3.3300e-003	0.1321	0.0368	3.1800e-003	0.0400		540.1183	540.1183	0.0317		540.9115
Worker	0.3168	0.1978	2.7866	8.5700e-003	0.8942	6.2600e-003	0.9005	0.2372	5.8800e-003	0.2430		854.1791	854.1791	0.0215		854.7174
Total	**0.3690**	**2.0065**	**3.2146**	**0.0156**	**1.0229**	**9.7200e-003**	**1.0319**	**0.2740**	**9.0700e-003**	**0.2831**		**1,394.297 4**	**1,394.297 4**	**0.0533**		**1,395.628 9**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**2.0836**	**0.9975**	**3.0812**	**0.3170**	**0.9280**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0441	1.4618	0.4863	7.0100e-003	0.1589	2.7100e-003	0.1716	0.0463	2.5000e-003	0.0488		760.9963	760.9963	0.0464		762.2050
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2590	3.6000e-003	0.2591	0.0737	2.9400e-003	0.0766		1,047.470 3	1,047.470 3	0.0559		1,048.864 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1179	7.7600e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4741**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1266**		**2,839.596 3**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0836	0.0000	2.0836	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4844**	**19.6434**	**0.0388**	**2.0836**	**0.9975**	**3.0812**	**0.3170**	**0.9280**	**1.2450**	**0.0000**	**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0441	1.4619	0.4563	7.0100e-003	0.1589	2.7100e-003	0.1616	0.0463	2.5000e-003	0.0489		760.9963	760.9963	0.0464		762.2060
Vendor	0.0779	2.7377	0.7709	9.7900e-003	0.2589	3.8000e-003	0.2591	0.0737	3.5000e-003	0.0766		1,047.470 9	1,047.470 9	0.0553		1,048.854 3
Worker	0.3723	0.2238	3.2170	0.0103	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		1,027.930 2	1,027.930 2	0.0243		1,028.537 0
Total	**0.4942**	**4.4234**	**4.4441**	**0.0271**	**1.5427**	**0.0136**	**1.5563**	**0.4164**	**0.0127**	**0.4291**		**2,836.397 4**	**2,836.397 4**	**0.1260**		**2,839.596 3**

3.9 Site Preparation - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2143	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2143**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0389	1.3699	0.3954	4.9000e-003	0.1230	1.6400e-003	0.1295	0.0369	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2885	3.8864	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.616 2	1,233.616 2	0.0291		1,234.244 4
Total	0.4857	1.6584	4.2818	0.0173	1.4643	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.351 5	1,757.351 5	0.0568		1,758.671 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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
Vendor	0.0389	1.3683	0.3864	4.4000e-003	0.1260	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4272
Worker	0.4467	0.2985	3.6804	0.0124	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,233.516 2	1,233.516 2	0.0291		1,234.244 4
Total	0.4857	1.6374	4.2458	0.0173	1.4673	0.0109	1.4802	0.3926	0.0101	0.4026		1,757.251 5	1,757.251 6	0.0568		1,758.671 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.9291		2,895.918 7

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2306	7.6512	2.4404	0.0357	0.0841	0.0142	0.0983	0.0223	0.0136	0.0359		3,983.047 2	3,983.047 2	0.2530		3,989.373 2
Vendor	0.0389	1.3695	0.3054	4.9000e-003	0.0200	1.5400e-003	0.0215	0.0055	1.4700e-003	0.0070		523.7354	523.7354	0.0277		524.4272
Worker	0.5957	0.3680	5.1471	0.0165	1.7684	0.0125	1.7809	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0388		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9729**	**0.0581**	**1.8725**	**0.0282**	**1.9007**	**0.5021**	**0.0265**	**0.5286**		**6,151.470 9**	**6,151.470 9**	**0.3196**		**6,159.459 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					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2306	7.6512	2.4404	0.0367	0.8841	0.0142	0.8983	0.2429	0.0136	0.2565		3,983.047 2	3,983.047 2	0.2630		3,989.373 3
Vendor	0.0389	1.3689	0.3654	4.8000e-003	0.1280	1.5400e-003	0.1295	0.0368	1.4700e-003	0.0383		523.7354	523.7354	0.0277		524.4273
Worker	0.5957	0.3580	5.1471	0.0165	1.7884	0.0125	1.8009	0.4743	0.0115	0.4858		1,644.688 3	1,644.688 3	0.0389		1,645.659 2
Total	**0.8652**	**9.3781**	**7.9529**	**0.0581**	**2.8005**	**0.0282**	**2.8287**	**0.7539**	**0.0265**	**0.7799**		**6,151.470 8**	**6,151.470 8**	**0.3196**		**6,159.459 6**

3.11 Building Construction - Phases 2 and 3 - 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		2,565.209 9	2,565.209 9	0.6079		2,570.406 1
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,565.209 9**	**2,565.209 9**	**0.6079**		**2,570.406 1**

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1169	4.1088	1.1563	0.0147	0.3940	4.6200e-003	0.3986	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0830		1,573.281 5
Worker	1.1189	0.6713	9.8609	0.0309	3.3533	0.0294	3.3787	0.8899	0.0215	0.9109		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2357	4.7779	10.8172	0.0456	3.7473	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 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					
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

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1168	4.1086	1.1583	0.0147	0.3840	4.6200e-003	0.3886	0.1106	4.4100e-003	0.1150		1,571.206 3	1,571.206 3	0.0838		1,573.301 6
Worker	1.1169	0.6713	9.6509	0.0309	3.3533	0.0234	3.3767	0.8890	0.0215	0.9105		3,083.790 5	3,083.790 5	0.0728		3,085.611 0
Total	1.2337	4.7779	10.8092	0.0456	3.7373	0.0280	3.7653	0.9999	0.0259	1.0258		4,654.996 8	4,654.996 8	0.1558		4,658.892 5

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1144	4.0864	1.1230	0.0146	0.3940	4.5700e-003	0.3986	0.1106	4.3700e-003	0.1149		1,566.509 7	1,566.509 7	0.0917		1,567.552 8
Worker	1.0570	0.8119	9.0161	0.0299	3.3533	0.0230	3.3763	0.8993	0.0212	0.9206		2,982.626 8	2,982.626 8	0.0899		2,984.295 7
Total	1.1714	4.8982	10.1392	0.0445	3.7473	0.0276	3.7749	0.9999	0.0256	1.0254		4,549.136 5	4,549.136 5	0.1815		4,551.848 3

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	1.4716	13.4439	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4439	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1144	4.0954	1.1230	0.0146	0.3848	4.5700e-003	0.3893	0.1106	4.3700e-003	0.1149		1,565.509 7	1,565.509 7	0.0817		1,567.552 6
Worker	1.0570	0.6118	9.0151	0.0299	3.3639	0.0230	3.3763	0.8993	0.0212	0.9106		2,982.626 8	2,982.626 8	0.0988		2,984.295 7
Total	**1.1714**	**4.7072**	**10.1382**	**0.0445**	**3.7373**	**0.0276**	**3.7649**	**0.9999**	**0.0256**	**1.0254**		**4,548.136 5**	**4,548.136 5**	**0.1805**		**4,551.848 3**

3.12 Paving - Phases 2 and 3 - 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		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
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**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0381	1.3655	0.3743	4.8700e-003	0.1260	1.5200e-003	0.1295	0.0369	1.4800e-003	0.0383		521.8365	521.8365	0.0272		522.5175
Worker	0.2819	0.1531	2.4040	7.9800e-003	0.8942	6.1800e-003	0.9004	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5286**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.203 7**	**1,317.203 7**	**0.0450**		**1,318.329 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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
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**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0381	1.3665	0.3743	6.8700e-003	0.1288	1.5300e-003	0.1295	0.0368	1.4000e-003	0.0383		521.9366	521.9366	0.0272		522.5175
Worker	0.2819	0.1831	2.4040	7.9600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6800e-003	0.2428		795.3672	795.3672	0.0178		795.8122
Total	**0.3200**	**1.5496**	**2.7784**	**0.0129**	**1.0222**	**7.6700e-003**	**1.0299**	**0.2740**	**7.1200e-003**	**0.2811**		**1,317.303 7**	**1,317.303 7**	**0.0450**		**1,318.329 7**

3.13 Architectural Coating - Phases 2 and 3 - 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	49.8733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1805	1.2189	1.6101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**50.1540**	**1.2189**	**1.6101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.8456	0.4834	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 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	49.9733					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	50.1540	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

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0762	2.7310	0.7407	9.7500e-003	0.2660	3.0500e-003	0.2691	0.0737	2.9100e-003	0.0766		1,043.673 1	1,043.673 1	0.0545		1,045.035 0
Worker	0.8456	0.4834	7.2121	0.0239	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,386.101 5	2,386.101 5	0.0534		2,387.436 6
Total	0.9218	3.2204	7.9608	0.0337	2.9486	0.0215	2.9701	0.7852	0.0199	0.8050		3,429.774 6	3,429.774 6	0.1079		3,432.471 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01
Unmitigated	3.9048	17.6188	43.6920	0.1781	15.5725	0.1245	15.6971	4.1658	0.1157	4.2815		18,192.40 41	18,192.40 41	0.7958		18,212.30 01

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,735	6,508,735

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	96	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

2-14 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551380	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day											lb/day				
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.487 9

2-14 Cont.

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 Mid Rise	623A03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4853
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	280.76	0.0303	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

CalEEMod Version: CalEEMod.2016.3.2 Page 43 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

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 Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2677
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.487 9**

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 44 of 46 Date: 4/12/2021 9:34 AM

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Summer

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive 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	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.3314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.823 5	5,018.823 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6695	0.2805	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	**8.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,058.071 6**	**5,058.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6768					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.8145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,010.823 5	5,010.823 5	0.0962	0.0920	5,040.647 9
Landscaping	0.6685	0.2505	21.7005	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2480	39.2480	0.0379		40.1950
Total	8.5499	4.1819	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0920	5,080.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

2-14 Cont.

Pacific Coast Commons Specific Plan Project

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	792.00	Space	0.00	219,900.00	0
Other Asphalt Surfaces	12.89	1000sqft	0.00	12,650.00	0
High Turnover (Sit Down Restaurant)	4.95	1000sqft	0.00	3,952.00	0
Apartments Mid Rise	283.00	Dwelling Unit	0.00	327,021.00	752
Regional Shopping Center	7.30	1000sqft	5.35	7,300.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	561.77	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.008

1.3 User Entered Comments & Non-Default Data

2-14 Cont.

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding underestimated land use sizes.

Construction Phase - Consistent with the DEIR's model.

Trips and VMT - See SWAPE comment regarding hauling trips. Worker and vendor trips consistent with the DEIR's model.

On-road Fugitive Dust -

Demolition - See SWAPE comment regarding demolition.

Grading - See SWAPE comment regarding acres of grading values, material mositure content, and material silt content. Material export consistent with the DEIR's model.

Architectural Coating - Architectural coating EFs consistent with the DEIR's model. See SWAPE comment regarding architectural coating areas.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Woodstoves - Consistent with the DEIR's model.

Area Coating - See SWAPE comment regarding area coating areas.

Energy Use -

Water And Wastewater - See SWAPE comment regarding wastewater treatment percentages.

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

Mobile Land Use Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	330.00	262.00

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblConstructionPhase	NumDays	230.00	105.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	20.00	42.00
tblConstructionPhase	NumDays	20.00	43.00
tblConstructionPhase	NumDays	20.00	44.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	10.00	22.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	223.55	237.00
tblFireplaces	NumberNoFireplace	28.30	26.00
tblFireplaces	NumberWood	13.15	0.00
tblGrading	MaterialExported	0.00	17,000.00
tblLandUse	LandUseSquareFeet	4,950.00	3,962.00
tblLandUse	LandUseSquareFeet	263,000.00	327,021.00
tblLandUse	LotAcreage	7.13	0.00
tblLandUse	LotAcreage	0.29	0.00
tblLandUse	LotAcreage	0.11	0.00
tblLandUse	LotAcreage	6.92	0.00
tblLandUse	LotAcreage	0.17	5.35
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	702.44	561.77
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.005
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	84.00	80.00

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, Winter

tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	84.00	30.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	VendorTripNumber	0.00	20.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	300.00
tblTripsAndVMT	WorkerTripNumber	15.00	60.00
tblTripsAndVMT	WorkerTripNumber	66.00	240.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	15.00	80.00
tblTripsAndVMT	WorkerTripNumber	332.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	66.00	80.00
tblTripsAndVMT	WorkerTripNumber	15.00	100.00
tblTripsAndVMT	WorkerTripNumber	18.00	120.00
tblTripsAndVMT	WorkerTripNumber	15.00	160.00
tblVehicleTrips	HS_TTP	19.20	19.40
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	4.96
tblVehicleTrips	ST_TR	158.37	299.59
tblVehicleTrips	ST_TR	49.97	42.00

2-14 Cont.

tblVehicleTrips	SU_TR	5.06	5.04
tblVehicleTrips	SU_TR	131.84	205.83
tblVehicleTrips	SU_TR	25.24	23.51
tblVehicleTrips	WD_TR	8.66	5.18
tblVehicleTrips	WD_TR	127.16	178.80
tblVehicleTrips	WD_TR	42.70	30.05
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.1481	41.5977	25.8913	0.0656	18.6891	2.0506	20.7397	10.0975	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0698	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**6,828.756 8**	**6,828.756 8**	**1.2565**	**0.0000**	**6,860.167 9**

2-14 Cont.

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	4.1481	41.5977	25.8913	0.0656	18.6891	2.0506	20.7397	10.0975	1.8866	11.9839	0.0000	6,679.690 6	6,679.690 6	1.2240	0.0000	6,710.291 0
2022	50.7478	21.9734	20.8622	0.0463	7.5106	0.9490	8.4595	3.6231	0.8731	4.4962	0.0000	4,539.160 1	4,539.160 1	0.9660	0.0000	4,566.487 6
2023	3.1913	29.1780	26.1645	0.0659	19.5356	1.2770	20.8126	10.3233	1.1749	11.4981	0.0000	6,828.756 8	6,828.756 8	1.2565	0.0000	6,860.167 9
2024	52.5051	18.1041	26.2624	0.0698	3.9608	0.6411	4.5196	1.0592	0.6027	1.6025	0.0000	6,984.766 5	6,984.766 5	0.8830	0.0000	7,006.840 8
Maximum	**52.5051**	**41.5977**	**26.2624**	**0.0859**	**19.5356**	**2.0506**	**20.8126**	**10.3233**	**1.8866**	**11.9839**	**0.0000**	**6,828.756 8**	**6,828.756 8**	**1.2565**	**0.0000**	**6,860.167 9**

	ROG	NOx	CO	SO2	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

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	8.5499	4.1519	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0860	0.6574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

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	8.5499	4.1919	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1341	0.0920	5,088.842 9
Energy	0.1195	1.0350	0.5574	6.5200e-003		0.0826	0.0826		0.0826	0.0826		1,303.740 4	1,303.740 4	0.0250	0.0239	1,311.467 9
Mobile	3.6801	17.7866	41.3513	0.1686	15.5725	0.1253	15.6978	4.1650	0.1163	4.2821		17,222.02 26	17,222.02 26	0.8030		17,242.09 77
Total	**12.3496**	**23.0063**	**65.3421**	**0.2013**	**15.5725**	**0.6463**	**16.2188**	**4.1650**	**0.6374**	**4.8031**	**0.0000**	**23,583.83 45**	**23,583.83 45**	**0.9621**	**0.1159**	**23,642.42 85**

2-14 Cont.

Pacific Coast Commons Specific Plan Project - South Coast AQMD Air District, 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
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 - Phase 1	Demolition	10/1/2021	10/31/2021	5	21	
2	Site Preparation - Phase 1	Site Preparation	11/1/2021	11/30/2021	5	22	
3	Grading - Phase 1	Grading	12/1/2021	1/31/2022	5	44	
4	Building Construction - Phase 1	Building Construction	2/1/2022	10/31/2022	5	196	
5	Paving - Phase 1	Paving	11/1/2022	12/31/2022	5	44	
6	Architectural Coating - Phase 1	Architectural Coating	11/1/2022	12/31/2022	5	44	
7	Demolition - Phases 2 and 3	Demolition	1/1/2023	3/28/2023	5	42	
8	Site Preparation - Phases 2 and 3	Site Preparation	2/1/2023	3/30/2023	5	22	
9	Grading - Phases 2 and 3	Grading	4/1/2023	5/30/2023	5	42	
10	Building Construction - Phases 2 and 3	Building Construction	5/1/2023	5/31/2024	5	262	
11	Paving - Phases 2 and 3	Paving	6/1/2024	7/31/2024	5	43	
12	Architectural Coating - Phases 2 and 3	Architectural Coating	6/1/2024	7/31/2024	5	43	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 662,218; Residential Outdoor: 220,739; Non-Residential Indoor: 18,378; Non-Residential Outdoor: 6,126; Striped Parking Area: 19,767 (Architectural Coating – sqft)

2-14 Cont.

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition - Phase 1	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phase 1	Excavators	3	8.00	158	0.38
Demolition - Phase 1	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phase 1	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phase 1	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phase 1	Excavators	1	8.00	158	0.38
Grading - Phase 1	Graders	1	8.00	187	0.41
Grading - Phase 1	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phase 1	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phase 1	Cranes	1	7.00	231	0.29
Building Construction - Phase 1	Forklifts	3	8.00	89	0.20
Building Construction - Phase 1	Generator Sets	1	8.00	84	0.74
Building Construction - Phase 1	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phase 1	Welders	1	8.00	46	0.45
Paving - Phase 1	Pavers	2	8.00	130	0.42
Paving - Phase 1	Paving Equipment	2	8.00	132	0.36
Paving - Phase 1	Rollers	2	8.00	80	0.38
Architectural Coating - Phase 1	Air Compressors	1	6.00	78	0.48
Demolition - Phases 2 and 3	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition - Phases 2 and 3	Excavators	3	8.00	158	0.38
Demolition - Phases 2 and 3	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation - Phases 2 and 3	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation - Phases 2 and 3	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading - Phases 2 and 3	Excavators	1	8.00	158	0.38
Grading - Phases 2 and 3	Graders	1	8.00	187	0.41

2-14 Cont.

Grading - Phases 2 and 3	Rubber Tired Dozers	1	8.00	247	0.40
Grading - Phases 2 and 3	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction - Phases 2 and 3	Cranes	1	7.00	231	0.29
Building Construction - Phases 2 and 3	Forklifts	3	8.00	89	0.20
Building Construction - Phases 2 and 3	Generator Sets	1	8.00	84	0.74
Building Construction - Phases 2 and 3	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction - Phases 2 and 3	Welders	1	8.00	46	0.45
Paving - Phases 2 and 3	Pavers	2	8.00	130	0.42
Paving - Phases 2 and 3	Paving Equipment	2	8.00	132	0.36
Paving - Phases 2 and 3	Rollers	2	8.00	80	0.38
Architectural Coating - Phases 2 and 3	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition - Phase 1	6	60.00	20.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phase 1	7	50.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phase 1	8	60.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phase 1	9	120.00	30.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phase 1	6	40.00	10.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phase 1	1	60.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition - Phases 2 and 3	6	100.00	40.00	406.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Phases 2 and 3	7	120.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Phases 2 and 3	6	160.00	20.00	2,125.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Phases 2 and 3	9	300.00	60.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving - Phases 2 and 3	6	80.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Phases 2 and 3	1	240.00	40.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

2-14 Cont.

3.1 Mitigation Measures Construction

3.2 Demolition - Phase 1 - 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					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0389		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	0.0389	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751		3,747.944 9	3,747.944 9	1.0549		3,774.317 4

3.2 Demolition - Phase 1 - 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	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 8
Vendor	0.0586	1.9015	0.5065	4.9600e-003	0.1280	3.9800e-003	0.1320	0.0369	3.7900e-003	0.0406		529.1003	529.1004	0.0364		529.9664
Worker	0.3680	0.2398	2.7688	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	0.5710	7.0905	4.3263	0.0278	1.3600	0.0259	1.3860	0.3666	0.0246	0.3912		2,931.745 6	2,931.745 6	0.1691		2,935.973 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					
Fugitive Dust					4.1873	0.0000	4.1873	0.6340	0.0000	0.6340			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	4.1873	1.5513	5.7386	0.6340	1.4411	2.0751	0.0000	3,747.944 9	3,747.944 9	1.0549		3,774.317 4

2-14 Cont.

3.2 Demolition - Phase 1 - 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	0.1443	4.9493	1.1115	0.0145	0.3378	0.0154	0.3532	0.0926	0.0147	0.1073		1,574.111 0	1,574.111 0	0.1115		1,576.898 6
Vendor	0.0586	1.9015	0.5066	4.9600e-003	0.1230	3.9800e-003	0.1320	0.0339	3.7900e-003	0.0406		529.1004	529.1004	0.0354		529.9854
Worker	0.3680	0.2399	2.7083	6.3100e-003	0.8842	5.5800e-003	0.8898	0.2372	5.0800e-003	0.2422		828.5343	828.5343	0.0222		829.0894
Total	**0.5710**	**7.0905**	**4.3263**	**0.0270**	**1.3680**	**0.0259**	**1.3950**	**0.3666**	**0.0246**	**0.3912**		**2,931.745 6**	**2,931.745 6**	**0.1691**		**2,935.973 6**

3.3 Site Preparation - Phase 1 - 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	3.0882	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	**3.0882**	**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**

2-14 Cont.

3.3 Site Preparation - Phase 1 - 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
Vendor	0.0293	0.9597	0.2553	2.4800e-003	0.0640	1.3900e-003	0.0650	0.0164	1.3000e-003	0.0209		264.5502	264.5502	0.0177		264.9927
Worker	0.2306	0.1498	1.8927	5.2000e-003	0.5639	4.1100e-003	0.5680	0.1492	3.7900e-003	0.1530		517.3339	517.8339	0.0139		518.1809
Total	0.2599	1.1096	1.9960	7.6880e-003	0.6279	5.4990e-003	0.6790	0.1657	5.0690e-003	0.1773		782.3841	782.3841	0.0316		783.1736

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.6882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.6882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

2-14 Cont.

3.3 Site Preparation - Phase 1 - 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	0.0293	0.9597	0.2533	2.4000e-003	0.0548	1.9000e-003	0.0568	0.0184	1.9000e-003	0.0203		264.6502	264.6502	0.0177		264.9927
Worker	0.2306	0.1498	1.6927	5.2000e-003	0.5589	4.1100e-003	0.5630	0.1482	3.7900e-003	0.1520		517.8339	517.8339	0.0139		518.1809
Total	0.2599	1.1096	1.9460	7.6000e-003	0.6229	6.0900e-003	0.6290	0.1667	5.6900e-003	0.1723		782.3841	782.3841	0.0316		783.1736

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.6575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.929 5	2,871.929 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.6575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.929 5	2,871.929 5	0.9288		2,895.149 5

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0293	0.9697	0.2633	2.4900e-003	0.0640	1.9800e-003	0.0660	0.0184	1.9000e-003	0.0203		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7083	8.3100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0800e-003	0.2432		828.5343	828.5343	0.0222		829.0894
Total	**0.3982**	**1.1985**	**2.9616**	**0.0108**	**0.9582**	**8.5600e-003**	**0.9668**	**0.2556**	**7.9800e-003**	**0.2635**		**1,093.084 5**	**1,093.084 5**	**0.0399**		**1,094.082 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9268		2,895.149 6
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**	**0.0000**	**2,871.928 5**	**2,871.928 5**	**0.9268**		**2,895.149 5**

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0293	0.9507	0.2533	2.4800e-003	0.0640	1.9800e-003	0.0660	0.0164	1.8000e-003	0.0183		264.5502	264.5502	0.0177		264.9927
Worker	0.3689	0.2398	2.7065	8.5100e-003	0.8942	6.5800e-003	0.9008	0.2372	6.0600e-003	0.2432		626.5343	626.5343	0.0222		626.0894
Total	0.3982	1.1905	2.9616	0.0108	0.9582	8.5600e-003	0.9668	0.2556	7.8600e-003	0.2635		1,093.084 5	1,093.084 5	0.0399		1,094.082 1

3.4 Grading - Phase 1 - 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	1.9486	20.8551	15.2727	0.0297	6.5523	0.9409	7.4932	3.3675	0.8656	4.2331		2,872.046 4	2,872.046 4	0.9269		2,895.260 4

2-14 Cont.

3.4 Grading - Phase 1 - 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	0.0225	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4988	6.0100e-003	0.8942	6.8900e-003	0.9008	0.2372	5.8900e-003	0.2430		798.8292	798.8292	0.0201		799.3306
Total	**0.3745**	**1.1182**	**2.7393**	**0.0105**	**0.9582**	**8.5100e-003**	**0.9663**	**0.2556**	**7.5300e-003**	**0.2631**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 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					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	1.9486	20.0551	15.2737	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9269		2,895.260 4
Total	**1.9486**	**20.0551**	**15.2737**	**0.0297**	**6.5523**	**0.9409**	**7.4932**	**3.3675**	**0.8656**	**4.2331**	**0.0000**	**2,872.046 4**	**2,872.046 4**	**0.9269**		**2,895.260 4**

2-14 Cont.

3.4 Grading - Phase 1 - 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
Vendor	0.0075	0.8017	0.2395	2.4500e-003	0.0640	1.7300e-003	0.0657	0.0164	1.6400e-003	0.0181		262.1942	262.1942	0.0170		262.6199
Worker	0.3470	0.2165	2.4996	6.0100e-003	0.8042	5.3900e-003	0.8096	0.2372	5.2500e-003	0.2430		799.8292	799.8292	0.0201		799.3305
Total	**0.3745**	**1.1182**	**2.7393**	**0.0105**	**0.8682**	**0.0108**	**0.8753**	**0.2536**	**7.5300e-003**	**0.2611**		**1,061.023 4**	**1,061.023 4**	**0.0371**		**1,061.950 4**

3.5 Building Construction - Phase 1 - 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	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		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**		**2,554.333 6**	**2,554.333 6**	**0.6120**		**2,569.632 2**

2-14 Cont.

3.5 Building Construction - Phase 1 - 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	0.0024	0.7062	0.7105	7.3600e-003	0.1908	5.1600e-003	0.1972	0.0550	4.8300e-003	0.0602		786.5027	786.5027	0.0511		787.6798
Worker	0.5205	0.3248	3.7497	0.0120	1.3413	9.5500e-003	1.3509	0.3557	8.6300e-003	0.3645		1,196.243 8	1,196.243 8	0.0301		1,196.995 8
Total	0.5229	1.0310	4.4602	0.0194	1.5321	0.0148	1.5481	0.4108	0.0139	0.4248		1,982.746 0	1,982.746 0	0.0812		1,984.675 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					
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

2-14 Cont.

3.5 Building Construction - Phase 1 - 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	0.0824	2.7052	0.7195	7.3600e-003	0.1920	5.1500e-003	0.1972	0.0553	4.9300e-003	0.0602		786.5927	786.5927	0.0511		787.8698
Worker	0.5205	0.3249	3.7497	0.0120	1.3413	9.5900e-003	1.3509	0.3567	8.8300e-003	0.3646		1,199.243 8	1,199.243 8	0.0301		1,199.995 8
Total	**0.6029**	**3.0299**	**4.4692**	**0.0194**	**1.5333**	**0.0148**	**1.5481**	**0.4119**	**0.0138**	**0.4249**		**1,984.836 5**	**1,984.836 5**	**0.0812**		**1,986.855 6**

3.6 Paving - Phase 1 - 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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

2-14 Cont.

3.6 Paving - Phase 1 - 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	0.0275	0.9017	0.2395	2.4500e-003	0.0548	1.7200e-003	0.0567	0.0184	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6189
Worker	0.1735	0.1083	1.2409	4.0100e-003	0.4471	3.2000e-003	0.4503	0.1186	2.9400e-003	0.1215		399.4146	399.4146	0.0100		399.6853
Total	**0.2010**	**1.0100**	**1.4094**	**6.4600e-003**	**0.5111**	**4.9200e-003**	**0.5160**	**0.1370**	**4.5800e-003**	**0.1416**		**661.6088**	**661.6088**	**0.0271**		**662.2052**

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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1028**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.660 3**	**2,207.660 3**	**0.7140**		**2,225.510 4**

2-14 Cont.

3.6 Paving - Phase 1 - 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	0.0275	0.9017	0.2385	2.4500e-003	0.0640	1.7200e-003	0.0657	0.0164	1.6400e-003	0.0201		262.1942	262.1942	0.0170		262.6199
Worker	0.1795	0.1068	1.2499	4.0100e-003	0.4471	3.2000e-003	0.4501	0.1186	2.9400e-003	0.1215		399.4145	399.4145	0.0100		399.6653
Total	0.2070	1.0100	1.4884	6.4600e-003	0.5111	4.9200e-003	0.5160	0.1370	4.5800e-003	0.1416		661.6088	661.6088	0.0271		662.2852

3.7 Architectural Coating - Phase 1 - 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					
Archit. Coating	49.0375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062
Total	49.0421	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0103		281.9062

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0550	1.8034	0.4790	4.8100e-003	0.1239	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3986	524.3986	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3000e-003	0.8896	0.2372	4.8900e-003	0.2420		799.8292	799.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9700**	**0.0179**	**1.0222**	**9.0300e-003**	**1.0321**	**0.2740**	**9.1800e-003**	**0.2832**		**1,323.217 7**	**1,323.217 7**	**0.0541**		**1,324.570 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					
Archit. Coating	48.8375					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0103		281.9062
Total	**49.0421**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0103**		**281.9062**

2-14 Cont.

3.7 Architectural Coating - Phase 1 - 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	0.0550	1.8034	0.4790	4.9100e-003	0.1299	2.4400e-003	0.1314	0.0369	2.2900e-003	0.0401		524.3985	524.3985	0.0341		525.2399
Worker	0.3470	0.2185	2.4908	8.0100e-003	0.8842	5.3900e-003	0.8896	0.2372	5.0000e-003	0.2423		798.8292	798.8292	0.0201		799.3305
Total	**0.4019**	**2.0199**	**2.9700**	**0.0129**	**1.0222**	**7.8300e-003**	**1.0321**	**0.2740**	**7.2900e-003**	**0.2824**		**1,323.227 7**	**1,323.227 7**	**0.0541**		**1,324.570 4**

3.8 Demolition - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6434	0.0388		0.9975	0.9975		0.9200	0.9200		3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	**2.2691**	**21.4044**	**19.6434**	**0.0388**	**2.0936**	**0.9975**	**3.0912**	**0.3170**	**0.9200**	**1.2450**		**3,746.984 0**	**3,746.984 0**	**1.0494**		**3,773.218 3**

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0494	1.4687	0.4506	6.8000e-003	0.1689	2.7900e-003	0.1717	0.0463	2.6800e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0520	2.7202	0.8471	9.5100e-003	0.2560	3.2300e-003	0.2592	0.0737	3.0900e-003	0.0768		1,017.446 6	1,017.446 6	0.0580		1,018.920 9
Worker	0.4091	0.2448	2.8799	9.6400e-003	1.1178	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8640
Total	0.5105	4.4337	4.2176	0.0260	1.5427	0.0138	1.5565	0.4164	0.0129	0.4293		2,725.643 2	2,725.643 2	0.1306		2,728.932 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0936	0.0000	2.0936	0.3170	0.0000	0.3170			0.0000			0.0000
Off-Road	2.2691	21.4044	19.6438	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3
Total	2.2691	21.4044	19.6438	0.0388	2.0936	0.9975	3.0912	0.3170	0.9280	1.2450	0.0000	3,746.984 0	3,746.984 0	1.0494		3,773.218 3

2-14 Cont.

3.8 Demolition - Phases 2 and 3 - 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	0.0454	1.4687	0.4505	6.6800e-003	0.1589	2.7800e-003	0.1617	0.0463	2.6600e-003	0.0490		746.9002	746.9002	0.0500		748.1504
Vendor	0.0920	2.7262	0.8471	9.5100e-003	0.2590	5.2300e-003	0.2642	0.0737	5.0600e-003	0.0788		1,017.446 8	1,017.446 8	0.0599		1,018.920 9
Worker	0.4091	0.2448	2.8709	9.6400e-003	1.1179	7.7800e-003	1.1256	0.2964	7.1700e-003	0.3036		961.2964	961.2964	0.0226		961.8610
Total	**0.5465**	**4.4397**	**4.2176**	**0.0260**	**1.5427**	**0.0138**	**1.5565**	**0.4164**	**0.0129**	**0.4293**		**2,725.643 2**	**2,725.643 2**	**0.1316**		**2,728.932 3**

3.9 Site Preparation - Phases 2 and 3 - 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										tons/yr					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**		**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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
Vendor	0.0410	1.3681	0.4795	4.7600e-003	0.1260	1.5100e-003	0.1275	0.0369	1.5400e-003	0.0384		506.7233	506.7233	0.0295		509.4604
Worker	0.4808	0.2938	3.4559	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,153.555 7	1,153.555 7	0.0271		1,154.233 2
Total	**0.5319**	**1.6538**	**3.8795**	**0.0163**	**1.4693**	**0.0110**	**1.4803**	**0.3926**	**0.0101**	**0.4027**		**1,662.279 0**	**1,662.279 0**	**0.0566**		**1,663.693 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					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.8595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	**2.8595**	**27.5242**	**18.2443**	**0.0381**	**18.0663**	**1.2660**	**19.3323**	**9.9307**	**1.1647**	**11.0954**	**0.0000**	**3,687.308 1**	**3,687.308 1**	**1.1926**		**3,717.121 9**

2-14 Cont.

3.9 Site Preparation - Phases 2 and 3 - 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	0.0410	1.3801	0.4295	3.7600e-003	0.1269	1.8100e-003	0.1286	0.0389	1.6700e-003	0.0404		508.7233	508.7233	0.0295		509.4604
Worker	0.4809	0.2936	3.4569	0.0116	1.3413	9.3400e-003	1.3507	0.3557	8.6000e-003	0.3643		1,163.555 7	1,163.555 7	0.0271		1,164.233 2
Total	0.5319	1.6738	3.8795	0.0153	1.4683	0.0110	1.4793	0.3926	0.0101	0.4027		1,672.279 0	1,672.279 0	0.0566		1,673.693 6

3.10 Grading - Phases 2 and 3 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.691 0	2,872.691 0	0.0291		2,895.910 2
Total	1.7109	17.9359	14.7507	0.0297	6.5981	0.7749	7.3730	3.3744	0.7129	4.0873		2,872.691 0	2,872.691 0	0.0291		2,895.918 2

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.2374	7.6871	2.5078	0.0360	0.0841	0.0146	0.0986	0.0233	0.0139	0.0372		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4235	4.7600e-003	0.0200	1.6100e-003	0.0216	5.7400e-003	1.5400e-003	7.2800e-003		508.7233	508.7233	0.0295		509.4604
Worker	0.6545	0.3917	4.6079	0.0154	1.7584	0.0125	1.7709	0.4743	0.0115	0.4858		1,538.074 3	1,538.074 3	0.0361		1,538.977 6
Total	**0.9329**	**9.4389**	**7.5392**	**0.0562**	**1.8625**	**0.0286**	**1.8911**	**0.7534**	**0.0269**	**0.7804**		**5,956.065 8**	**5,956.065 8**	**0.3274**		**5,964.249 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					
Fugitive Dust					6.5981	0.0000	6.5981	3.3744	0.0000	3.3744			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.691 0	2,872.691 0	0.9291		2,895.918 2
Total	**1.7109**	**17.9359**	**14.7507**	**0.0297**	**6.5981**	**0.7749**	**7.3730**	**3.3744**	**0.7129**	**4.0873**	**0.0000**	**2,872.691 0**	**2,872.691 0**	**0.9291**		**2,895.918 2**

2-14 Cont.

3.10 Grading - Phases 2 and 3 - 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	0.3374	7.6871	2.8678	0.0350	0.8941	0.0146	0.9088	0.2423	0.0139	0.2562		3,909.268 2	3,909.268 2	0.2617		3,915.811 7
Vendor	0.0410	1.3601	0.4236	4.7600e-003	0.1280	1.5100e-003	0.1295	0.0369	1.5400e-003	0.0384		509.7233	509.7233	0.0285		509.4604
Worker	0.6545	0.3317	4.8079	0.0164	1.7984	0.0125	1.8009	0.4743	0.0115	0.4858		1,536.074 3	1,536.074 3	0.0361		1,538.977 6
Total	0.9329	9.4389	7.5992	0.0662	2.8805	0.0206	2.8391	0.7534	0.0269	0.7804		5,956.065 8	5,956.065 8	0.3274		5,964.249 7

3.11 Building Construction - Phases 2 and 3 - 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

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1231	4.0800	1.3705	0.0143	0.3640	4.6400e-003	0.3686	0.1106	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0096		1,526.409 3
Worker	1.2272	0.7344	8.6396	0.0269	3.3533	0.0234	3.3767	0.8693	0.0215	0.8908		2,883.889 3	2,883.889 3	0.0679		2,885.583 0
Total	1.3502	4.8146	9.9105	0.0412	3.7173	0.0282	3.7455	0.9799	0.0261	1.0060		4,410.059 2	4,410.059 2	0.1562		4,413.964 3

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

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1231	4.0803	1.2705	0.0143	0.3946	4.8400e-003	0.3995	0.1105	4.6300e-003	0.1152		1,526.169 9	1,526.169 9	0.0885		1,528.381 1
Worker	1.2272	0.7944	8.6399	0.0289	3.3533	0.0294	3.3787	0.8993	0.0215	0.9208		2,883.889 3	2,883.889 3	0.0579		2,885.333 0
Total	1.3502	4.8746	9.9105	0.0432	3.7479	0.0342	3.7782	0.9098	0.0261	0.9360		4,410.059 2	4,410.059 2	0.1464		4,413.964 3

3.11 Building Construction - Phases 2 and 3 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4436	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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	0.1284	4.0714	1.2342	0.0142	0.3940	4.7700e-003	0.3988	0.1106	1.5800e-003	0.1151		1,520.979 2	1,520.979 2	0.0970		1,523.154 1
Worker	1.1849	0.8650	8.0553	0.0280	3.3533	0.0238	3.3763	0.8893	0.0212	0.9105		2,788.867 6	2,788.867 6	0.0620		2,790.418 3
Total	1.2853	4.7403	9.2895	0.0422	3.7373	0.0278	3.7651	0.9999	0.0258	1.0256		4,309.846 8	4,309.846 8	0.1590		4,313.572 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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

2-14 Cont.

3.11 Building Construction - Phases 2 and 3 - 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
Vendor	0.1204	4.0714	1.2342	0.0142	0.3840	4.7700e-003	0.3888	0.1106	4.5600e-003	0.1151		1,520.979 2	1,520.979 2	0.0870		1,523.154 1
Worker	1.1849	0.6890	8.0583	0.0280	2.3533	0.0230	2.3763	0.6893	0.0212	0.7105		2,788.867 8	2,788.867 8	0.0920		2,790.410 3
Total	**1.2053**	**4.7603**	**9.2925**	**0.0422**	**2.7373**	**0.0278**	**2.7651**	**0.9999**	**0.0258**	**1.0256**		**4,309.846 8**	**4,309.846 8**	**0.1790**		**4,313.572 4**

3.12 Paving - Phases 2 and 3 - 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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
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**		**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 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	0.0401	1.3571	0.4114	4.7400e-003	0.1200	1.5800e-003	0.1295	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0280		507.7180
Worker	0.3108	0.1784	2.1481	7.4600e-003	0.8842	6.1500e-003	0.8904	0.2372	5.6600e-003	0.2429		743.6880	743.6880	0.0165		744.1115
Total	**0.3508**	**1.5355**	**2.5595**	**0.0122**	**1.0222**	**7.7400e-003**	**1.0300**	**0.2740**	**7.1800e-003**	**0.2812**		**1,250.681 1**	**1,250.681 1**	**0.0445**		**1,251.829 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					
Off-Road	0.9882	9.5246	14.6256	0.0226		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6256**	**0.0226**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.547 2**	**2,207.547 2**	**0.7140**		**2,225.396 3**

2-14 Cont.

3.12 Paving - Phases 2 and 3 - 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
Vendor	0.0401	1.3571	0.4114	8.7400e-003	0.1260	1.5900e-003	0.1276	0.0369	1.5200e-003	0.0384		506.9931	506.9931	0.0250		507.7180
Worker	0.3106	0.1784	2.1481	7.4600e-003	0.8842	6.1800e-003	0.8904	0.2372	5.6800e-003	0.2428		743.6980	743.6980	0.0195		744.1135
Total	0.3508	1.5355	2.5595	0.0122	1.0222	7.7400e-003	1.0300	0.2740	7.1800e-003	0.2812		1,250.691 1	1,250.691 1	0.0455		1,251.829 6

3.13 Architectural Coating - Phases 2 and 3 - 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	49.9733					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	50.1540	1.2188	1.0101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	**1.0122**	**3.2494**	**7.2671**	**0.0319**	**2.9386**	**0.0216**	**2.9603**	**0.7852**	**0.0200**	**0.0052**		**3,245.080 2**	**3,245.080 2**	**0.1076**		**3,247.770 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				
Archit. Coating	49.9730					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1809	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	**50.1540**	**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**

2-14 Cont.

3.13 Architectural Coating - Phases 2 and 3 - 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	0.0803	2.7142	0.8228	9.4800e-003	0.2580	3.1800e-003	0.2592	0.0737	3.0400e-003	0.0767		1,013.986 1	1,013.986 1	0.0580		1,015.436 1
Worker	0.9319	0.5352	6.4443	0.0224	2.6826	0.0184	2.7011	0.7115	0.0170	0.7284		2,231.094 1	2,231.094 1	0.0496		2,232.334 6
Total	**1.0122**	**3.2494**	**7.2671**	**0.0319**	**2.9386**	**0.0216**	**2.9603**	**0.7852**	**0.0200**	**0.0052**		**3,245.080 2**	**3,245.080 2**	**0.1076**		**3,247.770 7**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6801	17.7865	41.3513	0.1665	15.5725	0.1253	15.6978	4.1648	0.1153	4.2801		17,222.03 26	17,222.02 26	0.8030		17,242.09 77
Unmitigated	3.6801	17.7865	41.3513	0.1665	15.5726	0.1253	15.6979	4.1650	0.1153	4.2801		17,222.03 26	17,222.02 26	0.8030		17,242.09 77

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,382.34	1,304.48	1325.52	4,801,434	4,801,434
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	899.51	1,478.02	1018.88	1,362,980	1,362,980
Other Asphalt Surfaces	0.00	0.00	0.00		
Regional Shopping Center	283.17	306.60	171.62	554,321	554,321
Total	2,565.01	3,089.10	2,516.00	6,508,736	6,508,736

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	9.70	40.00	19.40	40.60	66	11	3
Enclosed Parking with Elevator	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	8.90	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	16.60	8.40	8.90	0.00	0.00	0.00	0	0	0
Regional Shopping Center	16.60	8.40	8.90	16.30	64.70	19.00	54	35	11

2-14 Cont.

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Enclosed Parking with Elevator	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
High Turnover (Sit Down Restaurant)	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Regional Shopping Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1195	1.0380	0.5574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.7404	1,303.7404	0.0250	0.0239	1,311.4879
NaturalGas Unmitigated	0.1195	1.0380	0.5574	6.6200e-003		0.0826	0.0826		0.0826	0.0826		1,303.7404	1,303.7404	0.0250	0.0239	1,311.4879

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 Mid Rise	5234.03	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4863
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	3807.76	0.0305	0.2753	0.2312	1.6500e-003		0.0209	0.0209		0.0209	0.0209		330.3246	330.3246	6.3300e-003	6.0600e-003	332.2877
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	40	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7049	4.7049	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.7404**	**1,303.7404**	**0.0250**	**0.0239**	**1,311.4879**

2-14 Cont.

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 Mid Rise	8.23403	0.0888	0.7588	0.3229	4.8400e-003		0.0614	0.0614		0.0614	0.0614		968.7097	968.7097	0.0186	0.0178	974.4663
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.69776	0.0303	0.2763	0.2312	1.6600e-003		0.0209	0.0209		0.0209	0.0209		330.3248	330.3248	6.3300e-003	6.0600e-003	332.2977
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0.04	4.3000e-004	3.9200e-003	3.2900e-003	2.0000e-005		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004		4.7059	4.7059	9.0000e-005	9.0000e-005	4.7339
Total		**0.1195**	**1.0380**	**0.5574**	**6.5100e-003**		**0.0826**	**0.0826**		**0.0826**	**0.0826**		**1,303.740 4**	**1,303.740 4**	**0.0250**	**0.0239**	**1,311.497 9**

6.0 Area Detail

6.1 Mitigation Measures Area

2-14 Cont.

	ROG	NOx	CO	SO2	Fugitive 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	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0920	5,088.842 9
Unmitigated	8.5499	4.1819	23.4334	0.0263		0.4384	0.4384		0.4384	0.4384	0.0000	5,050.071 6	5,050.071 6	0.1341	0.0920	5,088.842 9

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.9145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Health	0.4601	3.9314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,018.623 5	5,018.623 5	0.0962	0.0920	5,048.647 9
Landscaping	0.6585	0.2505	21.7605	1.1500e-003		0.1205	0.1205		0.1205	0.1205		31.2480	31.2480	0.0379		40.1950
Total	**8.5499**	**4.1819**	**23.4334**	**0.0262**		**0.4384**	**0.4384**		**0.4384**	**0.4384**	**0.0000**	**5,050.071 6**	**5,050.071 6**	**0.1341**	**0.0920**	**5,088.842 9**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6168					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.6145					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.4601	0.3314	1.6729	0.0251		0.3179	0.3179		0.3179	0.3179	0.0000	5,019.823 5	5,019.823 5	0.0962	0.0920	5,049.647 9
Landscaping	0.6505	0.2505	21.7605	1.1500e-003		0.1206	0.1206		0.1206	0.1206		39.2400	39.2400	0.0079		40.1950
Total	8.5499	4.1919	23.4334	0.0262		0.4384	0.4384		0.4384	0.4384	0.0000	5,058.071 6	5,058.071 6	0.1041	0.0920	5,089.842 9

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

2-14 Cont.

Attachment D

Start date and time 04/05/21 10:13:47

AERSCREEN 16216

Pacific Coast Commons Operation

Pacific Coast Commons Operation

---------- DATA ENTRY VALIDATION ----------

	METRIC	ENGLISH
** AREADATA **	----------	----------
Emission Rate:	0.126E-02 g/s	0.998E-02 lb/hr
Area Height:	3.00 meters	9.84 feet
Area Source Length:	256.00 meters	839.90 feet
Area Source Width:	101.00 meters	331.36 feet
Vertical Dimension:	1.50 meters	4.92 feet
Model Mode:	URBAN	
Population:	16731	
Dist to Ambient Air:	1.0 meters	3. feet

** BUILDING DATA **

2-14 Cont.

No Building Downwash Parameters

** TERRAIN DATA **

No Terrain Elevations

Source Base Elevation: 0.0 meters 0.0 feet

Probe distance: 5000. meters 16404. feet

No flagpole receptors

No discrete receptors used

** FUMIGATION DATA **

No fumigation requested

** METEOROLOGY DATA **

Min/Max Temperature: 250.0 / 310.0 K -9.7 / 98.3 Deg F

Minimum Wind Speed: 0.5 m/s

2-14 Cont.

```
 Anemometer Height:   10.000 meters

 Dominant Surface Profile: Urban

 Dominant Climate Type:    Average Moisture

 Surface friction velocity (u*): not adjusted

DEBUG OPTION ON




 AERSCREEN output file:

 2021.04.05_PacificCoastCommons_Operation.out



 *** AERSCREEN Run is Ready to Begin




 No terrain used, AERMAP will not be run
**************************************************

SURFACE CHARACTERISTICS & MAKEMET

Obtaining surface characteristics...
```

2-14 Cont.

```
Using AERMET seasonal surface characteristics for Urban with Average Moisture
Season              Albedo      Bo        zo
Winter               0.35      1.50      1.000
Spring               0.14      1.00      1.000
Summer               0.16      2.00      1.000
Autumn               0.18      2.00      1.000

Creating met files aerscreen_01_01.sfc & aerscreen_01_01.pfl

Creating met files aerscreen_02_01.sfc & aerscreen_02_01.pfl

Creating met files aerscreen_03_01.sfc & aerscreen_03_01.pfl

Creating met files aerscreen_04_01.sfc & aerscreen_04_01.pfl

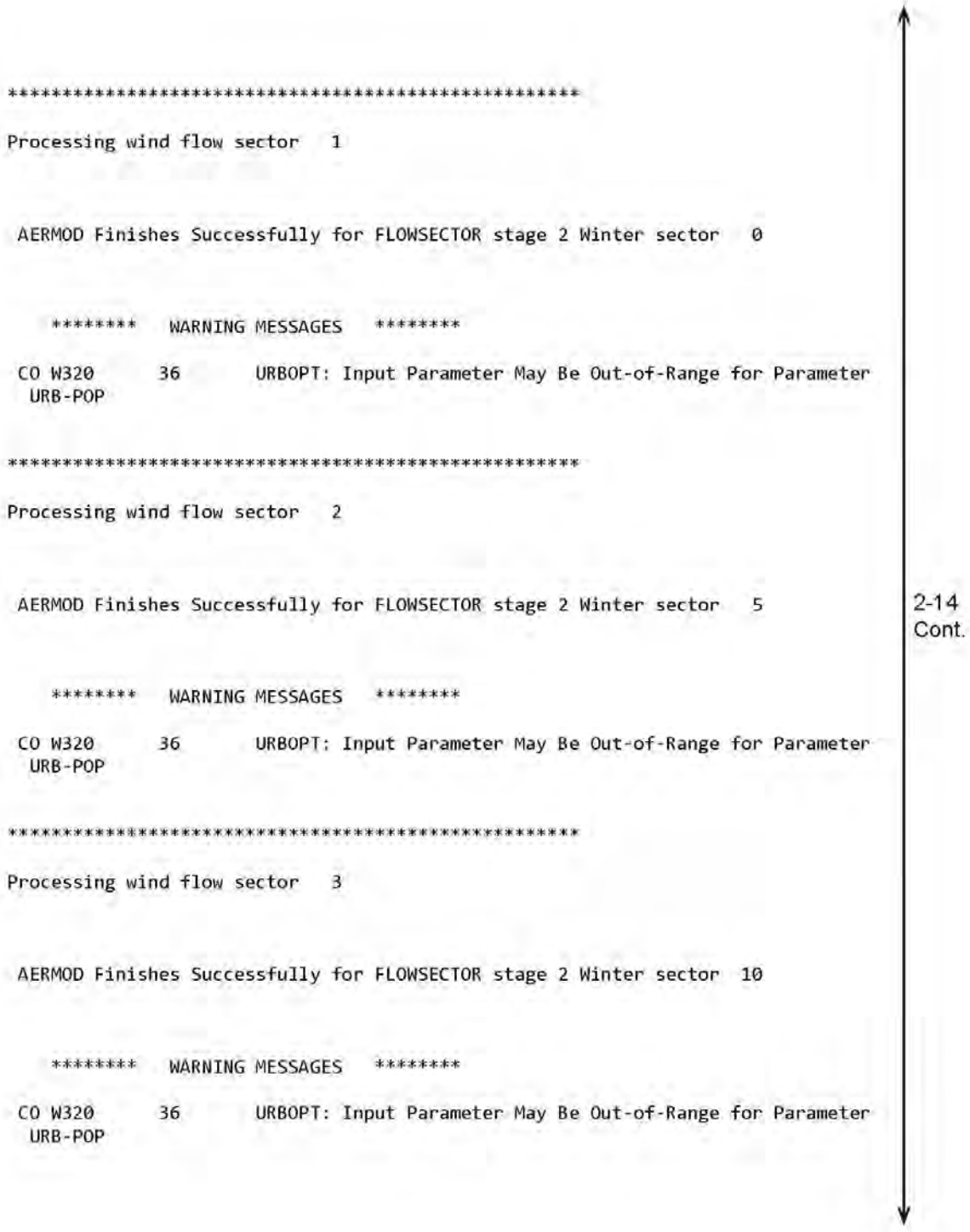
Buildings and/or terrain present or rectangular area source, skipping probe

FLOWSECTOR   started 04/05/21 10:15:50
 ********************************************

  Running AERMOD
 Processing Winter

Processing surface roughness sector  1
```

2-14 Cont.



```
**************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector   5


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
```

2-14 Cont.

```
**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Winter sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 **************************************************
```

2-14 Cont.

```
 Running AERMOD

 Processing Spring


Processing surface roughness sector  1


**********************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   0


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**********************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector   5


    ********   WARNING MESSAGES   ********

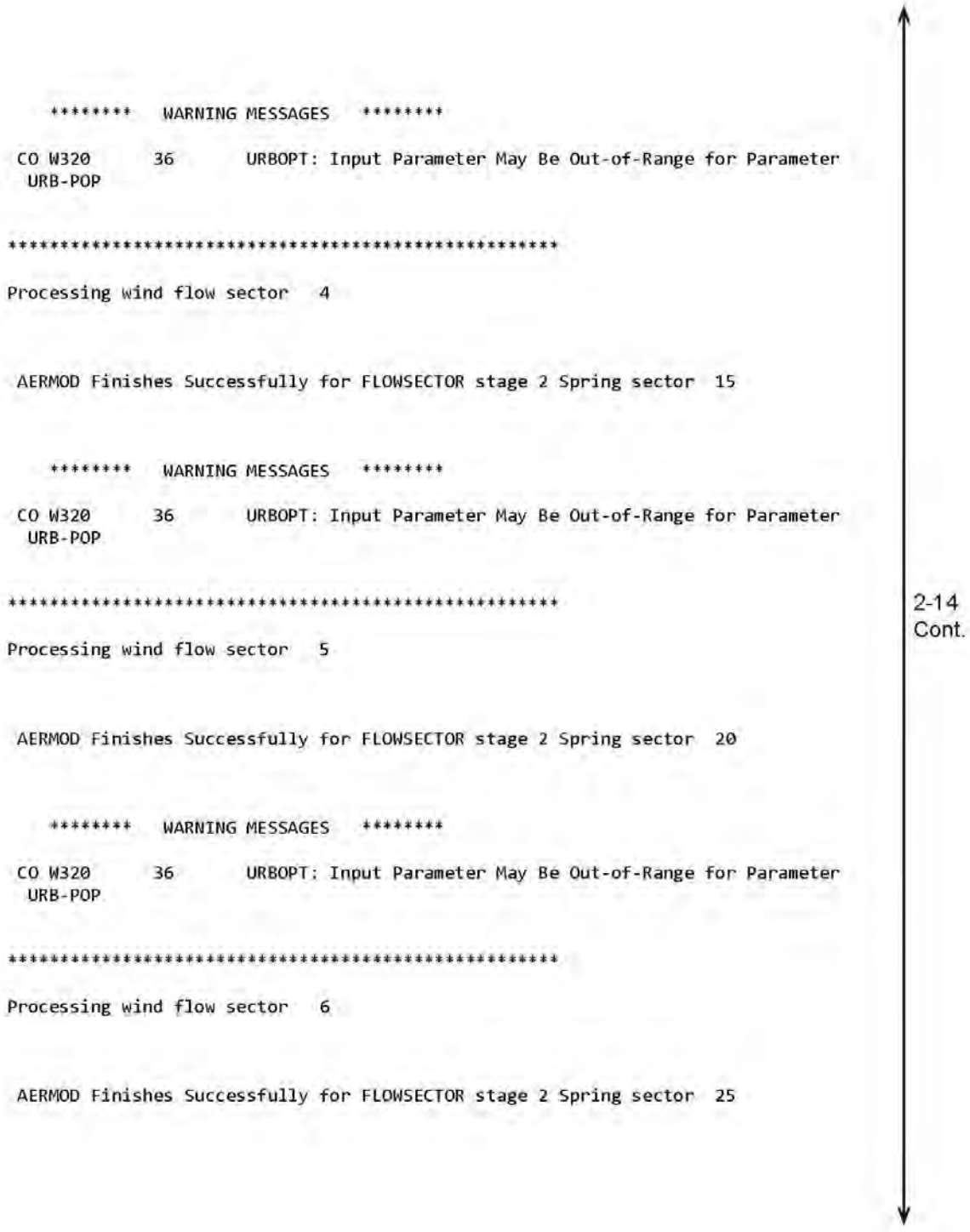
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**********************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  10
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  15


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  20


   ********   WARNING MESSAGES   ********

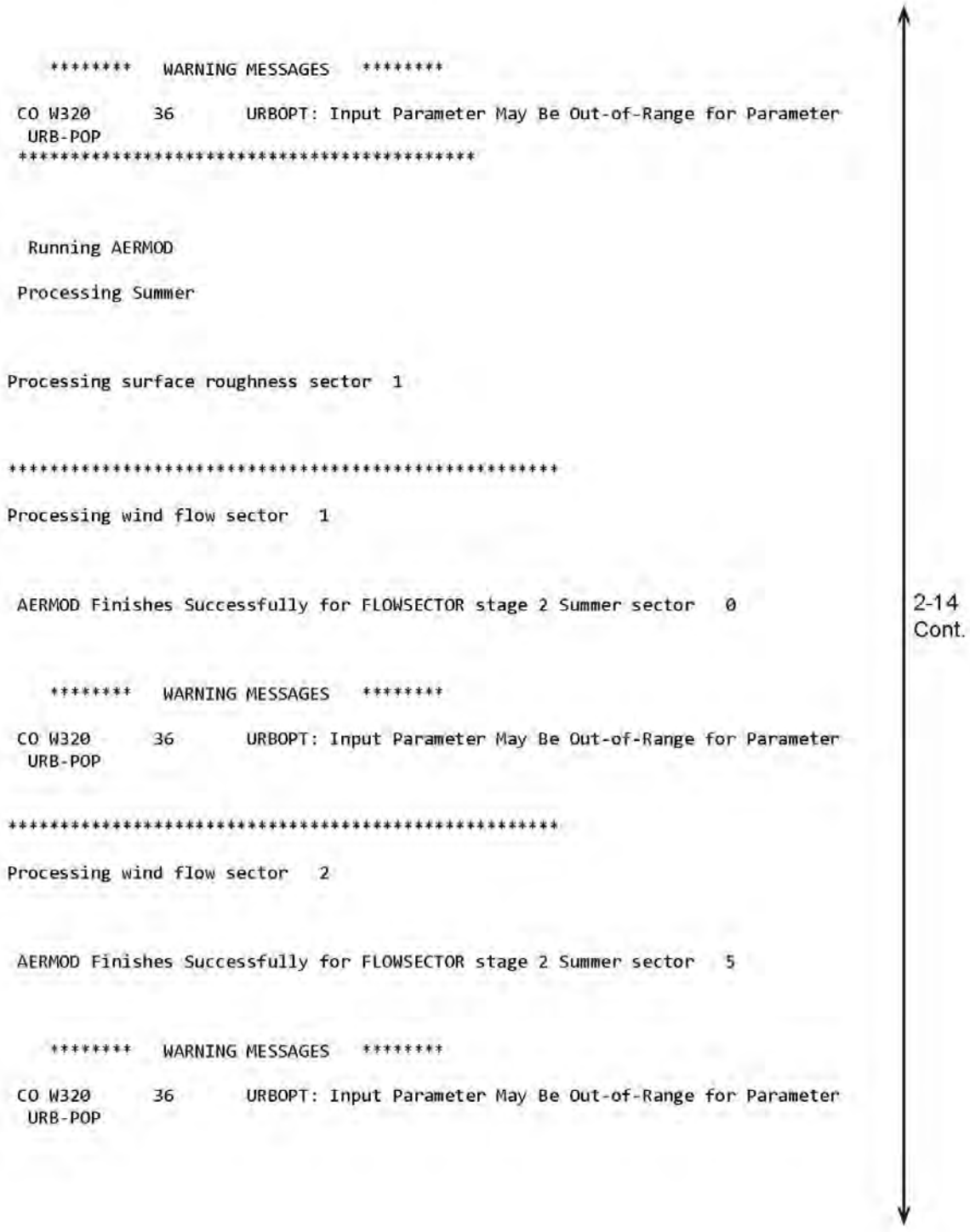
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Spring sector  25
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
*********************************************


 Running AERMOD

 Processing Summer


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   0


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP

*****************************************************

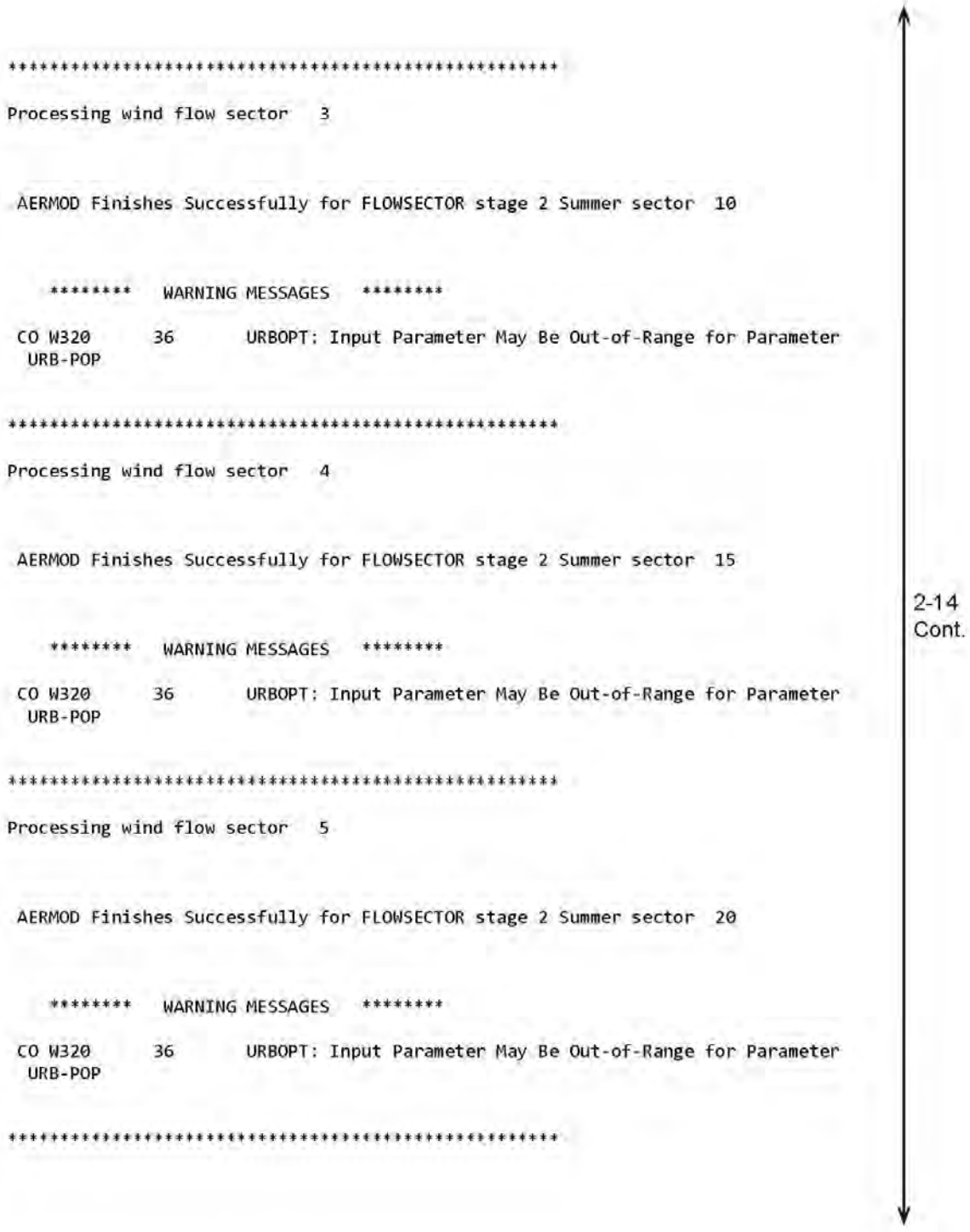
Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector   5


   ********   WARNING MESSAGES   ********

CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
 URB-POP
```

2-14
Cont.



```
**************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  10


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  15


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  20


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************
```

2-14
Cont.

```
Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Summer sector  25


    ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP
 *******************************************


  Running AERMOD

 Processing Autumn


Processing surface roughness sector  1


*****************************************************

Processing wind flow sector   1


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   0


    ********   WARNING MESSAGES   ********

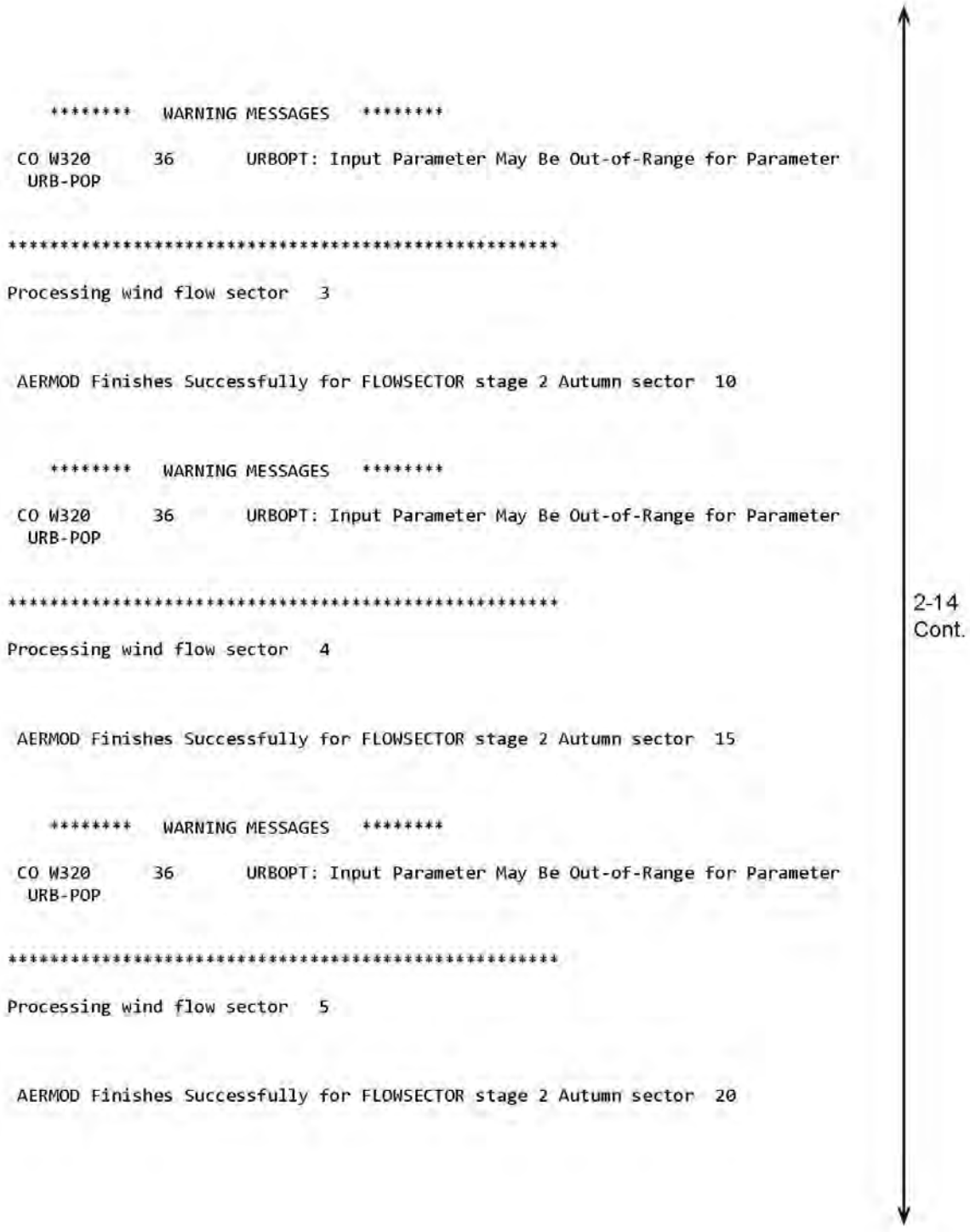
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   2


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector   5
```

2-14
Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   3


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  10


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   4


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  15


   ********   WARNING MESSAGES   ********

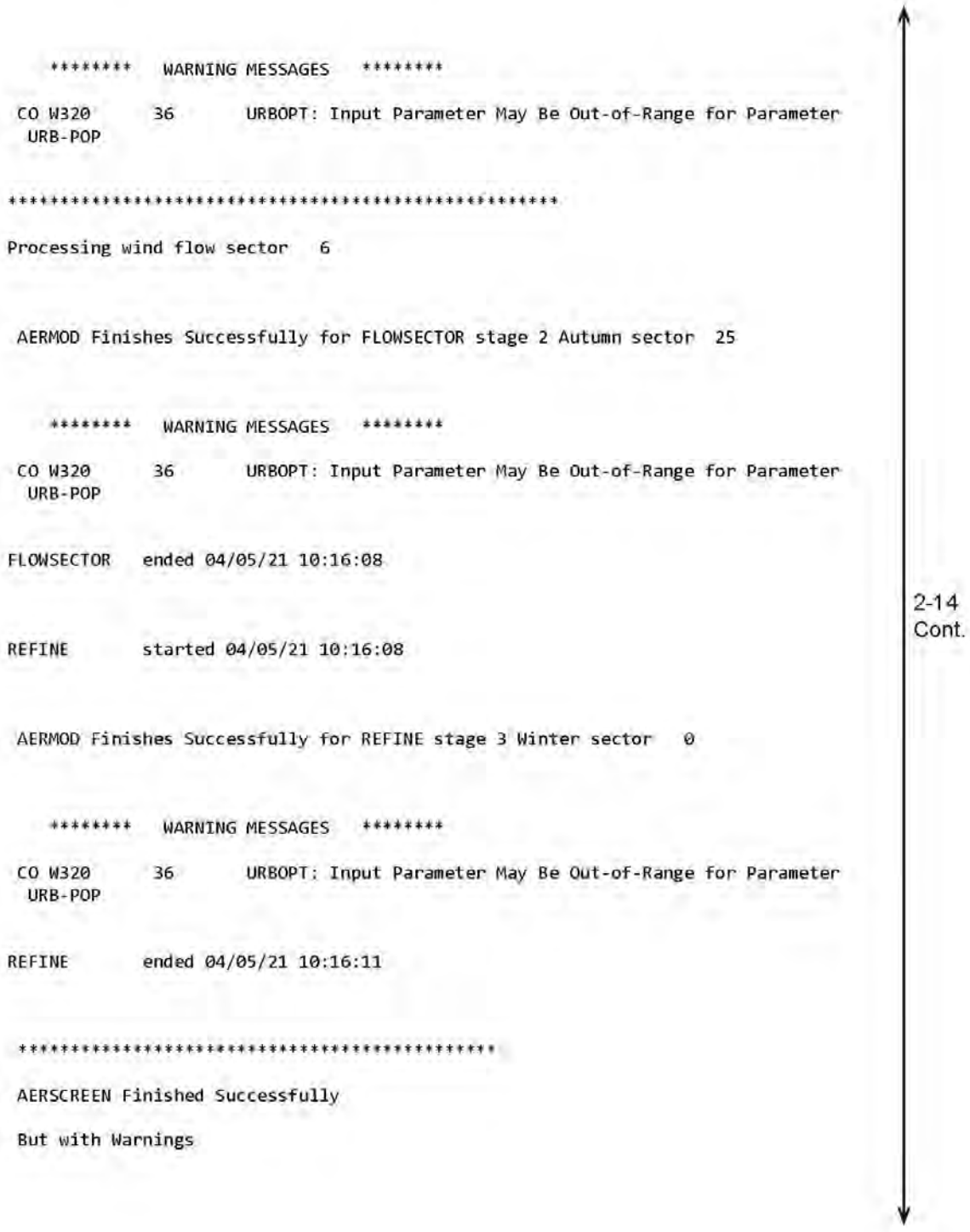
 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

*****************************************************

Processing wind flow sector   5


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  20
```

2-14 Cont.



```
   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

**************************************************

Processing wind flow sector   6


 AERMOD Finishes Successfully for FLOWSECTOR stage 2 Autumn sector  25


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

FLOWSECTOR   ended 04/05/21 10:16:08


REFINE       started 04/05/21 10:16:08


 AERMOD Finishes Successfully for REFINE stage 3 Winter sector   0


   ********   WARNING MESSAGES   ********

 CO W320      36       URBOPT: Input Parameter May Be Out-of-Range for Parameter
  URB-POP

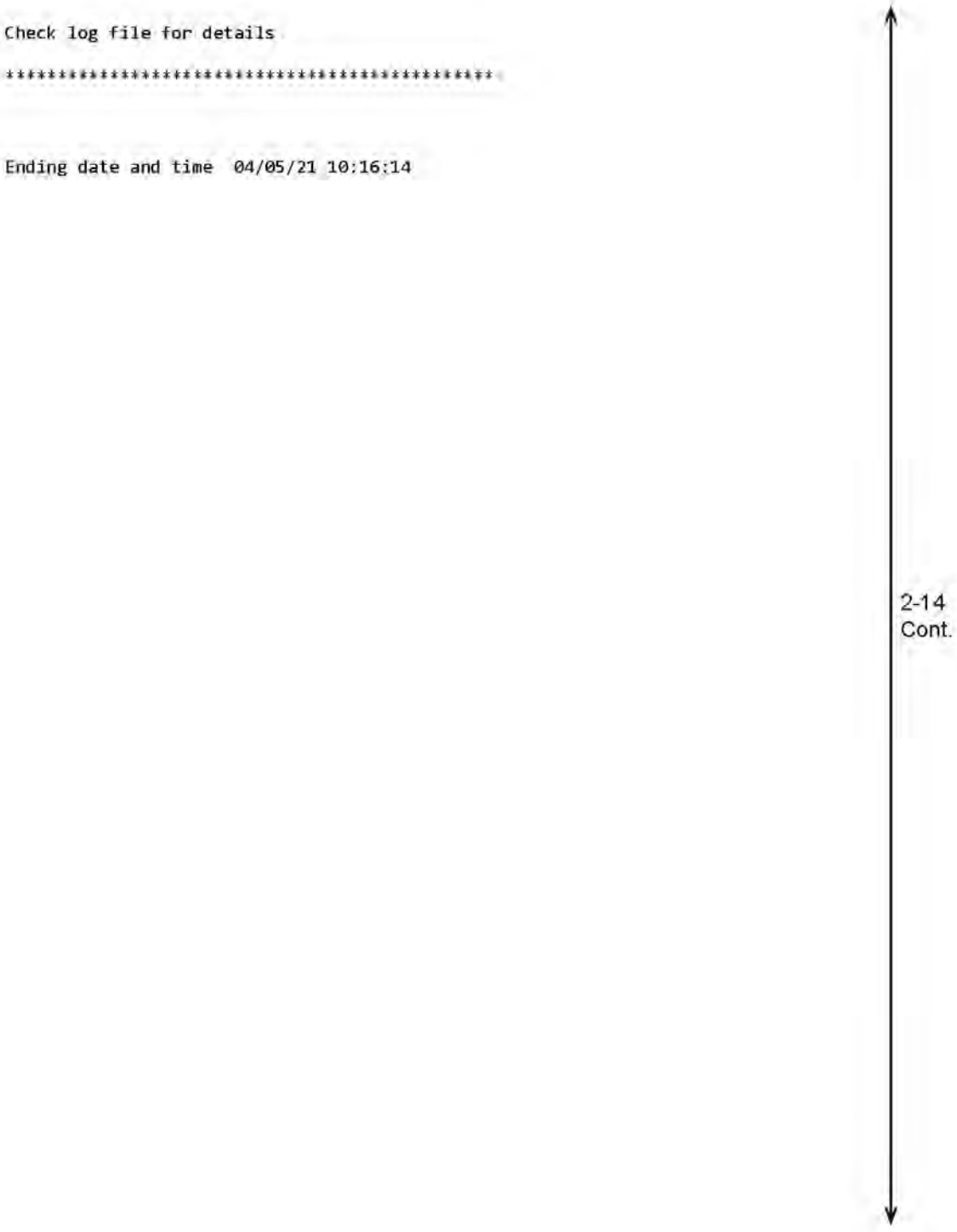
REFINE       ended 04/05/21 10:16:11


 ***********************************************

 AERSCREEN Finished Successfully

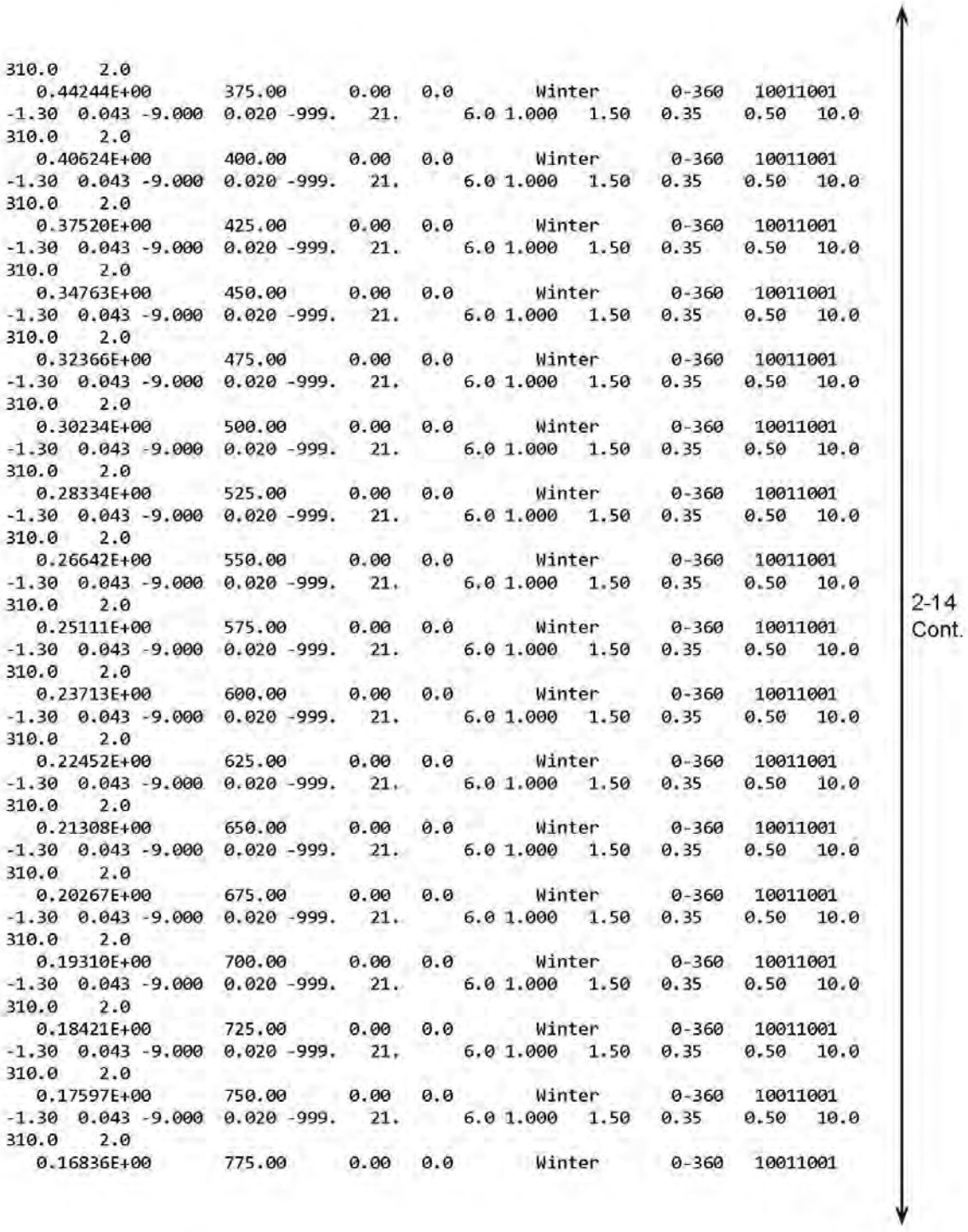
 But with Warnings
```

2-14
Cont.


Check log file for details
****
Ending date and time 04/05/21 10:16:14
2-14
Cont.

```
 Concentration     Distance Elevation  Diag  Season/Month   Zo sector       Date
 H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS     HT
REF TA     HT
   0.14967E+01         1.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16113E+01        25.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17120E+01        50.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17982E+01        75.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18752E+01       100.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19374E+01       125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
*  0.19469E+01       129.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15401E+01       150.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12075E+01       175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99699E+00       200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.85889E+00       225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75015E+00       250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66363E+00       275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59258E+00       300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53380E+00       325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48434E+00       350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.

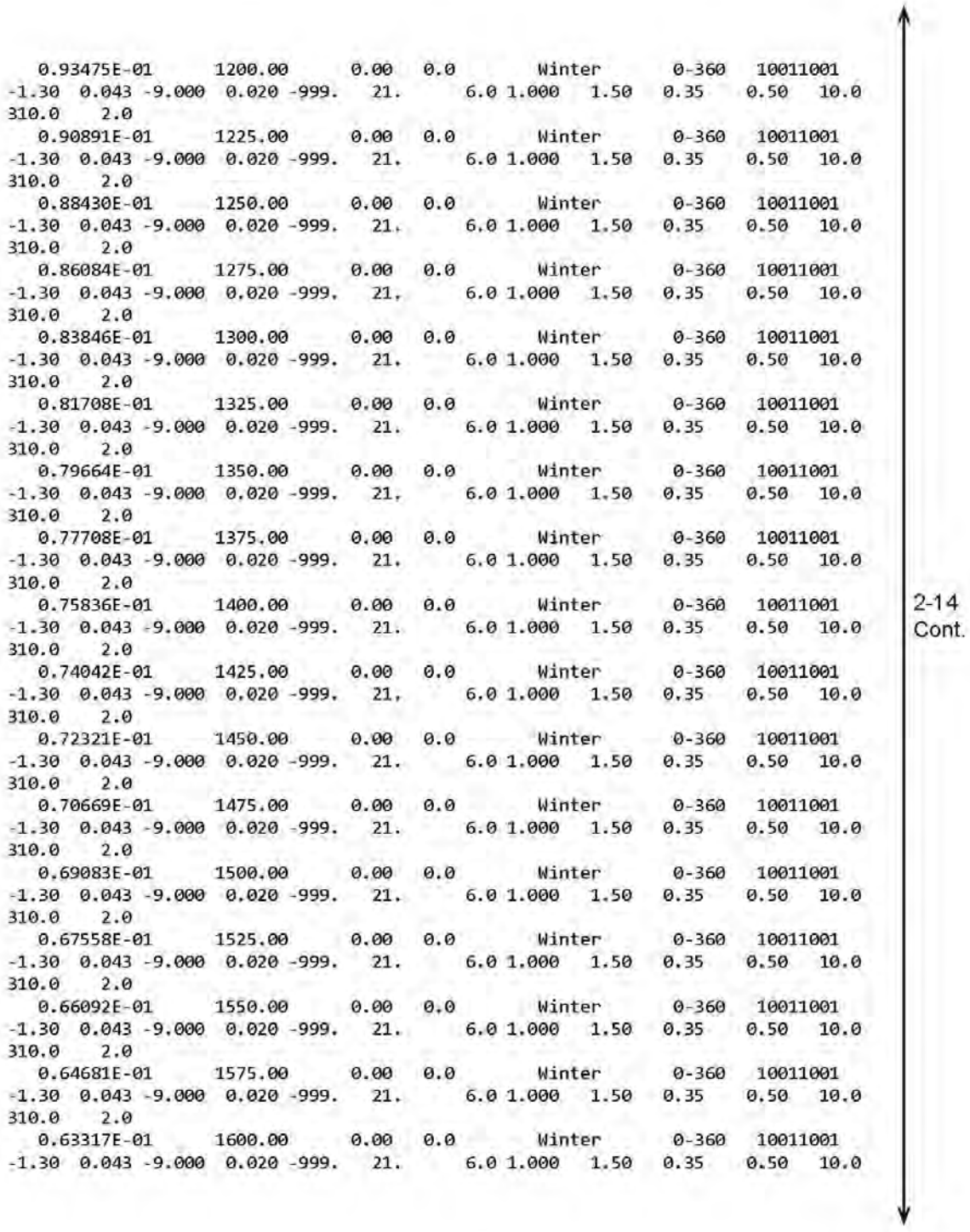


```
310.0    2.0
   0.44244E+00       375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40624E+00       400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37520E+00       425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34763E+00       450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32366E+00       475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30234E+00       500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28334E+00       525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26642E+00       550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25111E+00       575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23713E+00       600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22452E+00       625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21308E+00       650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20267E+00       675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19310E+00       700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18421E+00       725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17597E+00       750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16836E+00       775.00      0.00   0.0        Winter       0-360   10011001
```

2-14 Cont.

```
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16133E+00       800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15481E+00       825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14875E+00       850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14310E+00       875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13775E+00       900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13275E+00       925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12807E+00       950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.12367E+00       975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11953E+00      1000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11564E+00      1025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.11194E+00      1050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10844E+00      1075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10513E+00      1100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.10199E+00      1125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.99015E-01      1150.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.96192E-01      1175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.



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   0.93475E-01      1200.00      0.00   0.0        Winter       0-360   10011001
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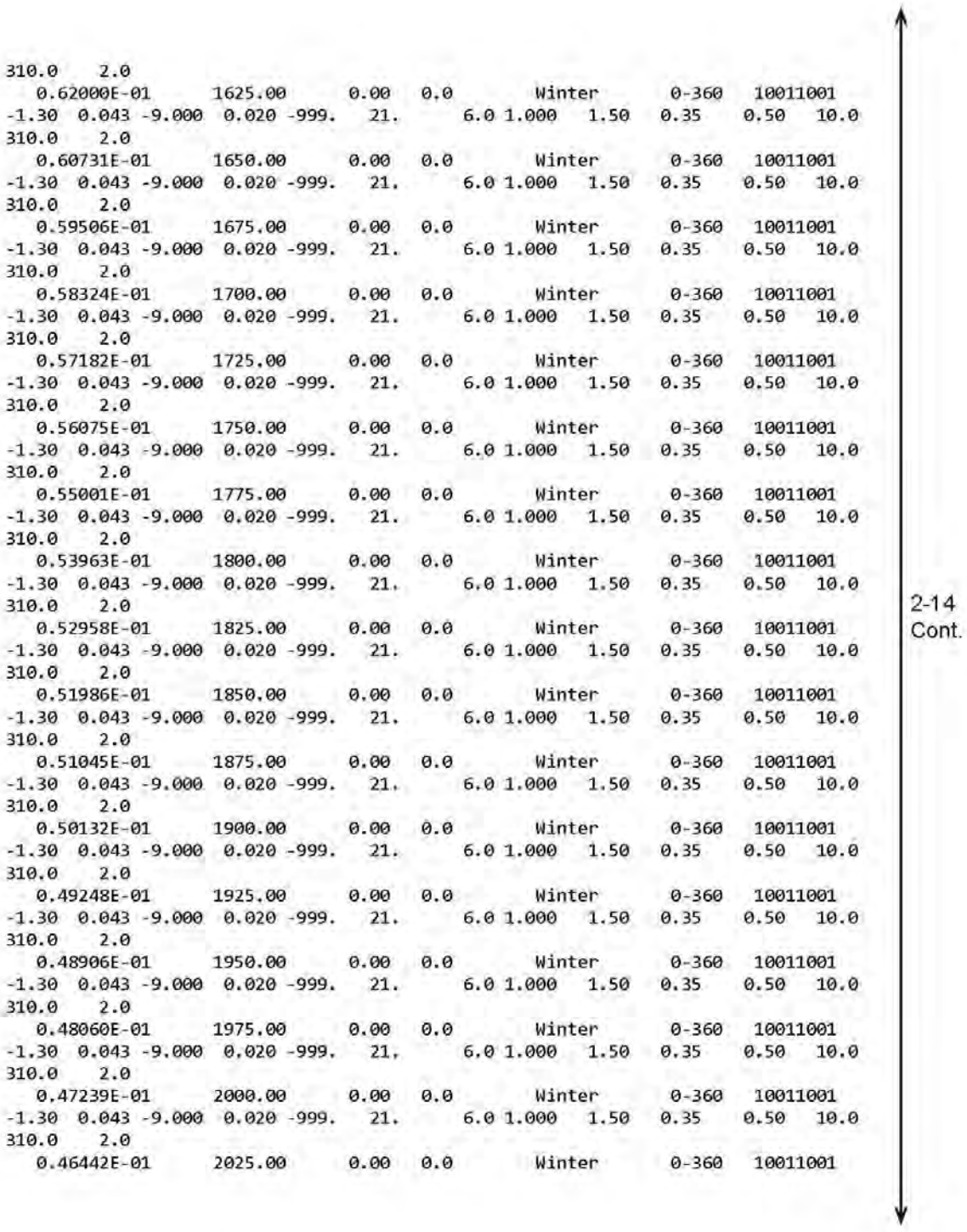
310.0    2.0
   0.90891E-01      1225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.88430E-01      1250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.86084E-01      1275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.83846E-01      1300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.81708E-01      1325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.79664E-01      1350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.77708E-01      1375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.75836E-01      1400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.74042E-01      1425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.72321E-01      1450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.70669E-01      1475.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.69083E-01      1500.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.67558E-01      1525.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.66092E-01      1550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.64681E-01      1575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.63317E-01      1600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14
Cont.



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310.0    2.0
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310.0    2.0
   0.60731E-01      1650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.59506E-01      1675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.58324E-01      1700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.57182E-01      1725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.56075E-01      1750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.55001E-01      1775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.53963E-01      1800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.52958E-01      1825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51986E-01      1850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.51045E-01      1875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.50132E-01      1900.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.49248E-01      1925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.48906E-01      1950.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.48060E-01      1975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.47239E-01      2000.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
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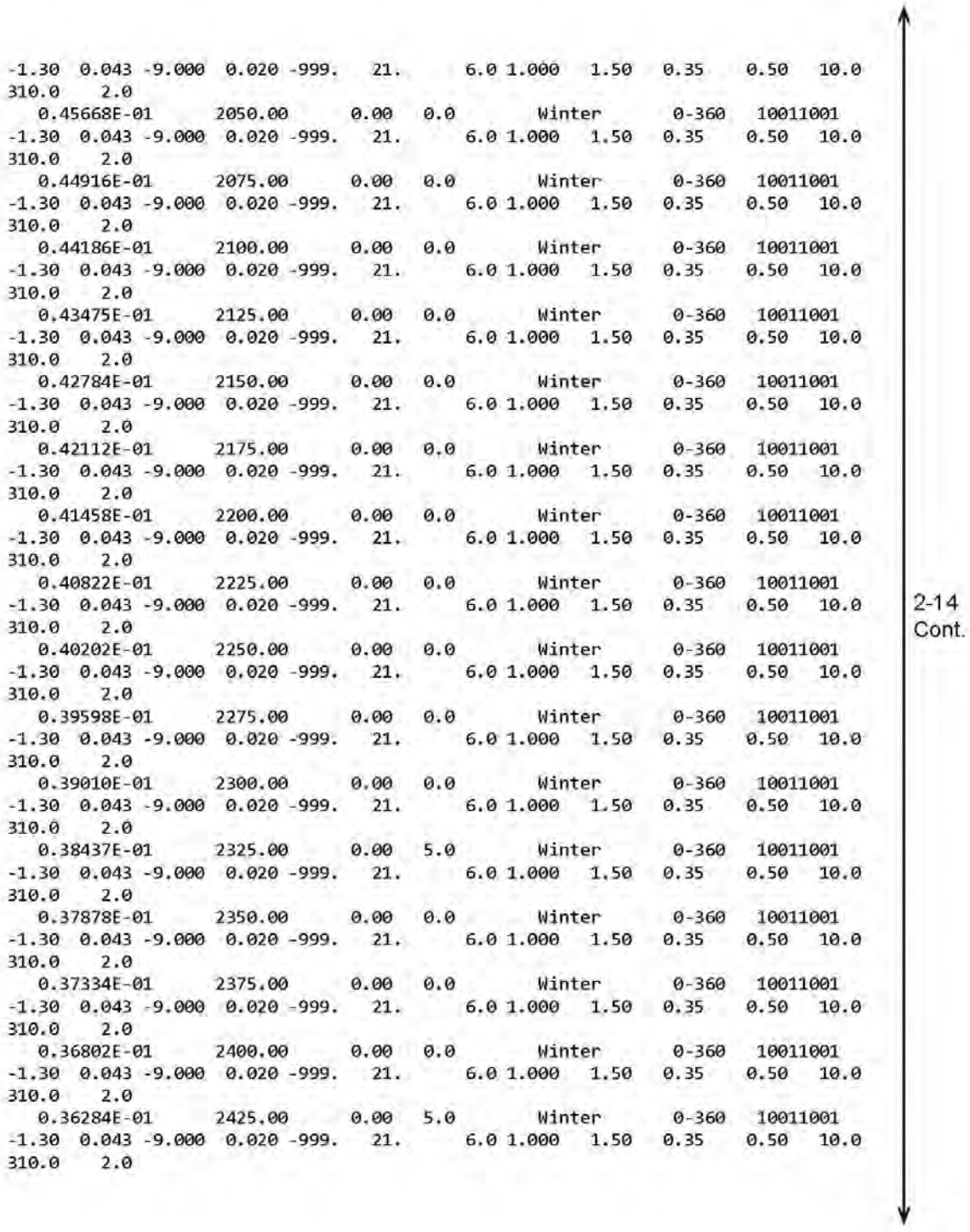
2-14 Cont.



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310.0    2.0
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310.0    2.0
   0.44916E-01      2075.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.44186E-01      2100.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.43475E-01      2125.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.42784E-01      2150.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.42112E-01      2175.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.41458E-01      2200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40822E-01      2225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.40202E-01      2250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39598E-01      2275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.39010E-01      2300.00      0.00   0.0        Winter       0-360   10011001
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310.0    2.0
   0.38437E-01      2325.00      0.00   5.0        Winter       0-360   10011001
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310.0    2.0
   0.37878E-01      2350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.37334E-01      2375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36802E-01      2400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.36284E-01      2425.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

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   0.35778E-01      2450.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.35284E-01      2475.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34802E-01      2500.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.34331E-01      2525.00      0.00   5.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33871E-01      2550.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.33422E-01      2575.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32983E-01      2600.00      0.00   0.0        Winter      0-360   10011001
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310.0    2.0
   0.32554E-01      2625.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.32134E-01      2650.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31723E-01      2675.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.31322E-01      2700.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30930E-01      2725.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30545E-01      2750.00      0.00  10.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.30169E-01      2775.00      0.00  10.0        Winter      0-360   10011001
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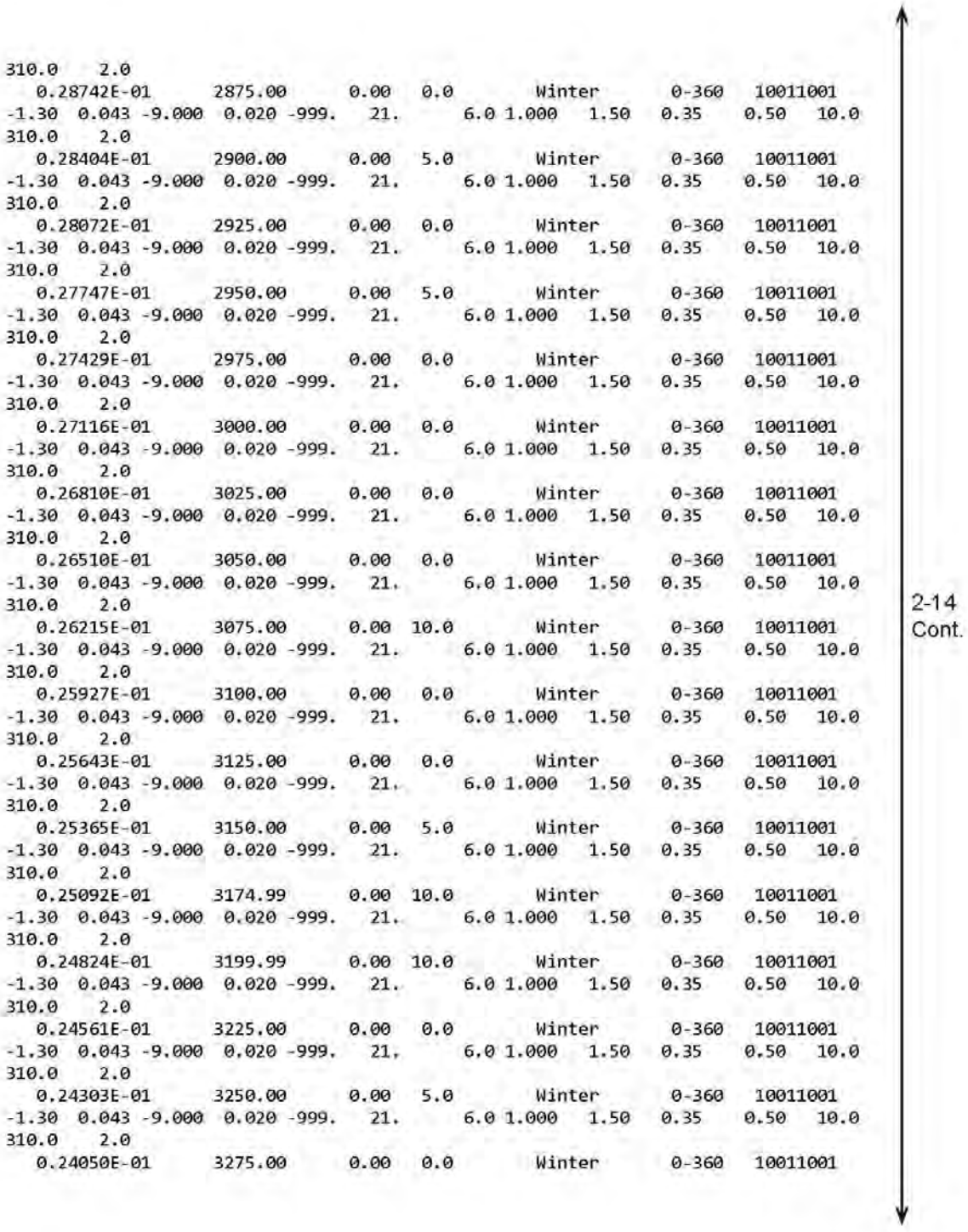
310.0    2.0
   0.29801E-01      2800.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29441E-01      2825.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.29088E-01      2850.00      0.00   0.0        Winter      0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.



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310.0    2.0
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310.0    2.0
   0.28404E-01      2900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.28072E-01      2925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27747E-01      2950.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27429E-01      2975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.27116E-01      3000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26810E-01      3025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26510E-01      3050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.26215E-01      3075.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25927E-01      3100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25643E-01      3125.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.25365E-01      3150.00      0.00   5.0        Winter       0-360   10011001
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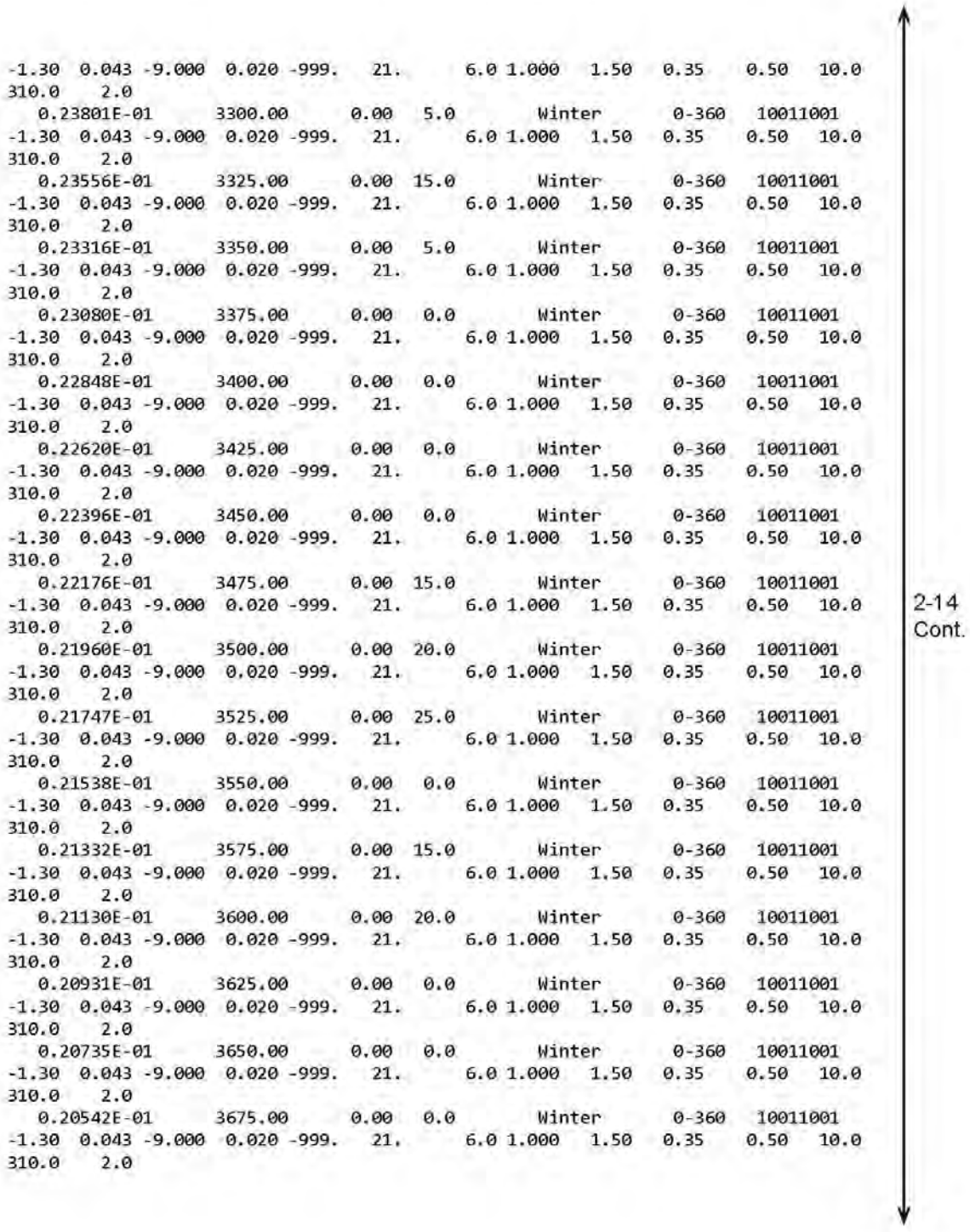
310.0    2.0
   0.25092E-01      3174.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24824E-01      3199.99      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24561E-01      3225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24303E-01      3250.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.24050E-01      3275.00      0.00   0.0        Winter       0-360   10011001
```

2-14 Cont.



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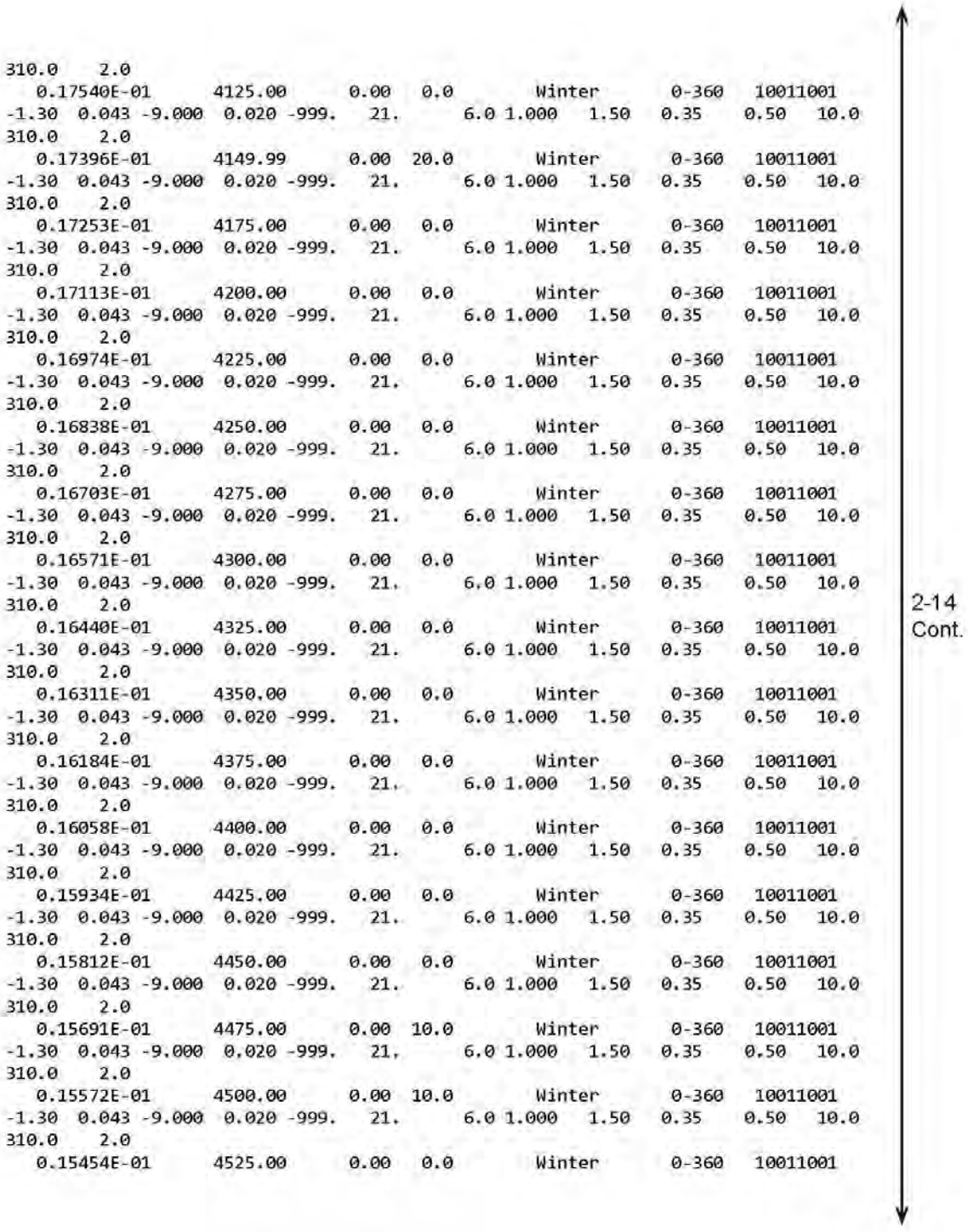
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23801E-01      3300.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23556E-01      3325.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23316E-01      3350.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.23080E-01      3375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22848E-01      3400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22620E-01      3425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22396E-01      3450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.22176E-01      3475.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21960E-01      3500.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21747E-01      3525.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21538E-01      3550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21332E-01      3575.00      0.00  15.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.21130E-01      3600.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20931E-01      3625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20735E-01      3650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20542E-01      3675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14
Cont.

```
   0.20352E-01      3700.00      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.20166E-01      3724.99      0.00  20.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19982E-01      3750.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19801E-01      3775.00      0.00  25.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19623E-01      3800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19448E-01      3825.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19276E-01      3850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.19106E-01      3875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18938E-01      3900.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18774E-01      3925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18611E-01      3950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18451E-01      3975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18294E-01      4000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.18138E-01      4025.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17986E-01      4050.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17835E-01      4075.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.17686E-01      4100.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
```

2-14 Cont.



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310.0    2.0
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310.0    2.0
   0.17396E-01      4149.99      0.00  20.0        Winter       0-360   10011001
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310.0    2.0
   0.17253E-01      4175.00      0.00   0.0        Winter       0-360   10011001
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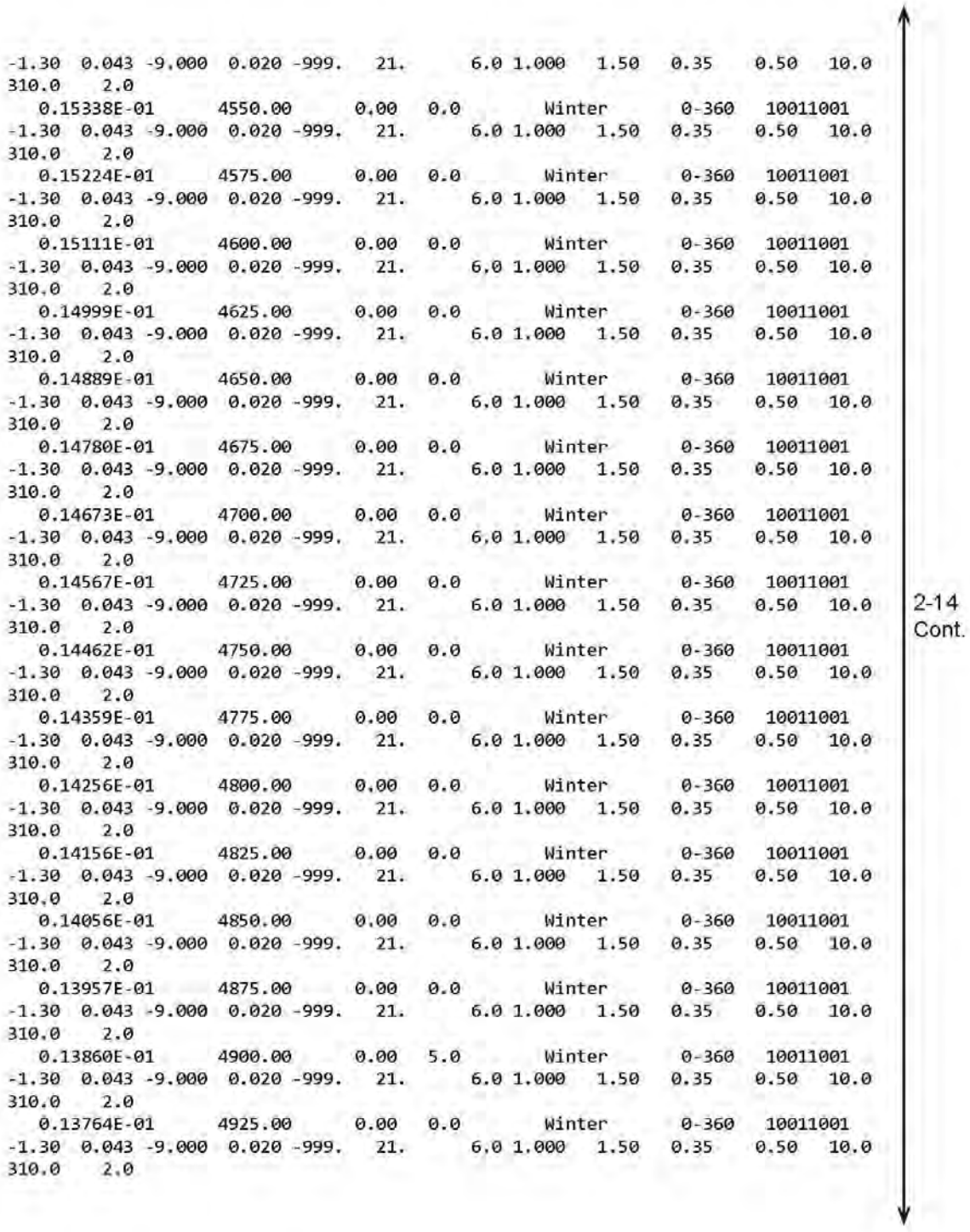
310.0    2.0
   0.17113E-01      4200.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16974E-01      4225.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16838E-01      4250.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16703E-01      4275.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16571E-01      4300.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16440E-01      4325.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16311E-01      4350.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16184E-01      4375.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.16058E-01      4400.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15934E-01      4425.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15812E-01      4450.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15691E-01      4475.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15572E-01      4500.00      0.00  10.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15454E-01      4525.00      0.00   0.0        Winter       0-360   10011001
```

2-14
Cont.



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-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15338E-01      4550.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15224E-01      4575.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.15111E-01      4600.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14999E-01      4625.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14889E-01      4650.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14780E-01      4675.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14673E-01      4700.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14567E-01      4725.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14462E-01      4750.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14359E-01      4775.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14256E-01      4800.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14156E-01      4825.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.14056E-01      4850.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13957E-01      4875.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13860E-01      4900.00      0.00   5.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13764E-01      4925.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

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   0.13669E-01      4950.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13575E-01      4975.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
   0.13482E-01      5000.00      0.00   0.0        Winter       0-360   10011001
-1.30  0.043 -9.000  0.020 -999.   21.      6.0 1.000   1.50   0.35    0.50   10.0
310.0    2.0
```

2-14 Cont.

Attachment E

SWAPE 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.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

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.

2-15

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 H_2O 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.

Cheremisinoff, 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.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, 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.

2-15 Cont.

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., Sellew, 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.

2-15 Cont.

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.

2-15 Cont.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane 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.

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 Florala, 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.

2-15 Cont.

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.

2-15 Cont.

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.

2-15 Cont.

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

Deposition and/or Trial Testimony:

In the United States District Court For The Southern District of Illinois
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant.*
Case No.: 3:19-cv-00302-SMY-GCS
Rosenfeld Deposition. 2-19-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, *Plaintiff*, vs. Marathon Petroleum, LP, *Defendant*
Case No.: 1716-CV10006
Rosenfeld Deposition. 8-30-2019

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 Agrosciences, 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

2-15 Cont.

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case: No 1:19-cv-00315-RHW
Rosenfeld Deposition, 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warm 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

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

2-15 Cont.

Attachment F

SWAPE 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
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
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 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. 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) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2104, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

2-15 Cont.

- 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 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, 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 more than 150 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- 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.

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.

2-15 Cont.

- 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.
- 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

2-15 Cont.

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

2-15 Cont.

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

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 is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

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, Coloradao.

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).

5

2-15 Cont.

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

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 repesentatives, 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.

6

2-15 Cont.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

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., Fukanaga, 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.

2-15 Cont.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

2-15 Cont.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.

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Response to Comment Letter 2

Supporters Alliance for Environmental Responsibility
("SAFER", via Lozeau Drury LLP)
December 9, 2021

2-1 In summary, this comment includes an introductory statement for the comment letter and asserts the Final EIR does not adequately inform about or analyze environmental impacts, and does not impose feasible mitigation measures to reduce impacts. Additionally, the comment notes further comments within Comment Letter 2 were prepared with the assistance of Francis "Bud" Offermann, P.E., CIH (included as Comments 2-9 and 2-10). Please see Response to Comments 2-9 and 2-10 for more discussion. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-2 In summary, this comment correctly summarizes the Project Description for the proposed Project. However, the comment states the site is bound by Los Angeles International Airport (LAX) to the north. For informational purposes, LAX is not located immediately adjacent to the Project site, but instead 0.5-mile to the north. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-3 In summary, this comment cites various excerpts of case law and related to CEQA's legislative intent to inform decision makers and the public and avoid and reduce environmental impacts or adopt a statement of overriding considerations. The EIR for the proposed Project was prepared in compliance with CEQA and the CEQA Guidelines, codified in Title 14 of the California Code of Regulations, section 15000 *et seq*. The comment does not raise any specific concerns related to the adequacy of the environmental analysis in the EIR; therefore, no further response to this comment is required.

2-4 In summary, this comment states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, the commenter speculates on indoor air quality associated with finishes used on building material and furniture. Indoor air quality does not rise to the level of substantial evidence because it is generalized and does not address the specific impacts of this Project. Building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins, and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor PM2.5 concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and PM2.5 emissions. The commenter is speculating in the assertion that composite wood materials would be used in the interior of the building. Indoor building materials will not be known until the building permit stage, and as stated above, these materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

2-5 In summary, this comment states that the SWRCC included a memorandum which concluded that there is Substantial Evidence that the Project will have significant adverse air quality, health risk, and GHG impacts.

The SWRCC letter has been responded to in full in Response to Comment Letter 1 (see Responses to Comments 1-1 through 1-53) in this document. As discussed in these responses, all comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-6 The commenter states that there is substantial evidence that the Project may have a significant health impact as a result of DPM.

The SWRCC letter included similar assertions regarding DPM-related health risk. See Comment Letter 1 (Response to Comment 1-42) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-7 The commenter states that they believe that the impact conclusions contained in the Draft EIR are inadequate. Specifically, the commenter states that the Project would result in significant impacts based on 1) The Draft EIR's quantitative GHG analysis relies upon an incorrect and unsubstantiated air

model; 2) The Draft EIR's quantitative GHG analysis relies upon an outdated threshold; 3) The Draft EIR's unsubstantiated air model indicates a potentially significant impact; 4) The Draft EIR fails to consider the performance-based standards under CARB's Scoping Plan; and; 5) The Draft EIR fails to consider the performance-based standards under SCAG's RTP/SCS.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-43) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-8 This comment notes the aforementioned comments (included as Comments 2-4 through 2-7) as reasons why the EIR is inadequate. Additionally, the comment expresses opposition to the proposed Project. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

2-9 The commenter states that the Project would expose residents and commercial employees of the Project to significant impacts related to indoor air quality, and in particular, emissions of the cancer-causing chemical formaldehyde.

Please see Response to Comment 2-4.

2-10 This comment includes the curriculum vitae of Francis "Bud" J. Offermann II, P.E., CIH. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-11 In summary, the comment states that the Draft EIR did not support its findings with substantial evidence.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-8 through 1-25). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-12 The commenter provides technical modeling to discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

This comment is interpreted to be a request that the City implement a "local hire" requirement on the proposed Project, citing benefits to greenhouse gas, air quality, and transportation impacts through decreased trip lengths. As stated in Draft EIR Sections 4.2, Air Quality, 4.6, Greenhouse Gas Emissions, and Section 4.13, Transportation, there are no significant short-term construction-related or long-term operational environmental impacts that are related to the length of vehicle trips or the proximity of workers to the Project site. CalEEMod was used to calculate the annual GHG emissions based on the construction scenario described in Section 4.6.3, Thresholds of Significance. Construction of the proposed Project is anticipated to commence in October 2021 and reach completion in July 2024, lasting a total of 34 months.[3] On-site sources of GHG emissions include off-road equipment and off-

[3] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction

site sources including haul trucks, vendor trucks, and worker vehicles. Overall, the Project was estimated to result in approximately 1,977 MT CO_2e per year and 66 MT CO_2e amortized over 30 years, consistent with SCAQMD guidance which states that construction emissions should be amortized over 30 years (SCAQMD 2008). Thus, the GHG analysis adds amortized construction emissions to the estimated annual operational emissions and then compares operational emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year. As presented on Table 4.6-4 of the EIR, the Project's GHG emissions associated with development of the proposed Project would be 2,921 MT CO_2e, which is below the SCAQMD GHG threshold of 3,000 MT CO_2e per year. No changes to the Draft EIR are required and additional mitigation measures are not required to reduce GHG emissions. Therefore, there is no obligation under CEQA to consider implementation of skilled and trained workforce requirements, and no changes to the EIR are required.

2-13 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

2-14 The commenter states that the input parameters of the air quality and GHG modeling are unsubstantiated.

This comment is a direct repeat of comments provided in Comment Letter 1 (see Responses to Comments 1-28 through 1-51). As discussed in the responses, the comments raised have been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

2-15 This comment represents the curriculum vitae of Paul Rosenfeld, Ph.D., and Matt Hagemann, P.G., C.Hg. The comment does not express any environmental comments or concerns related to the environmental analysis in the Draft EIR. No response is required.

impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

Verbal Comment 1

Verbal Comment 1

Nino Mascolo
Property Owner
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Water supply

The environmental impact report addresses and describes the capacity to provide water adequately however, does not address the topic of water quantity and water supply. There is a "will serve" letter from the utility, but that's all. There is analysis of the water supply. We have been in a drought for the last two years and the state is considering fines for those users not reducing their water consumption.

The environmental impact report did not address the drought. It did not address whether there will be incremental use increase or to what extent the project will use more water compared to the current water use under baseline conditions. Given the need to decrease water consumption statewide, that is a critical issue. This project increases water consumption, so the burden should fall on the developer not on the community to obtain additional water.

1-1

Parking

The environmental impact report appendices state that there will be a before and after parking study which is a good idea. But any impacts that occur because of the development impose a burden on the property owners, their guests, and the public to figure out what to do. The environmental impact report does not require the project developer to address any of those parking impacts. There is a suggestion that a parking permit program be implemented, but I don't know how practical it will be. I propose that the project's residents and employees be the ones required to obtain parking passes. They should be the ones ticketed for parking next to Washington Park, which is a popular destination, and not the existing residents in the neighborhood. It's not fair for property owners and their guests to be burdened. The staff report states that the project will have to meet less strict parking requirements. The project residents and users will not park in a parking structure (within the project area) that is far from their units. Instead, they will choose to park on the street which is more convenient.

1-2

Traffic

EIR Section 4.1 3.4 talks about intersections. It states that five intersections will remain at level E or worse with the project. The project should be mitigating those impacts. We should be asking the developer to make things a little better and not impose worse conditions on the neighbors. Appendix J says there will be 2,500 additional daily trips caused by the project but parking is not being addressed.

1-3

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Response to Verbal Comment 1

Nino Mascolo
Individual
December 9, 2021

1-1 In summary, this comment states the Draft EIR does not adequately address water quality and water supply under drought conditions. Additionally, the comment expresses concern with the Project's water consumption.

The commenter was not specific in their concerns related to water quality. Please see Draft EIR Section 4.8, Hydrology and Water Quality, for discussion related to existing regulations and Project-specific analysis related to water quality standards.

In summary, this comment states the Draft EIR does not analyze Project impacts to water supply. As mentioned by the commenter, a Water Supply Will Serve Letter (included as Appendix G-2 of the Draft EIR) was referenced in the Draft EIR's analysis. Appendix G-2 was prepared by the City's Water Department to support the analysis contained within Section 4.15, Utilities and Service Systems, of the Draft EIR and represents assurance for the Project's anticipated water demands by providing and requiring potable water connections. In return, the City will charge the Project Applicant various fees for providing potable water and wastewater services to serve the proposed Project (Draft EIR page 4.15-21). Additionally, the Draft EIR summarizes applicable components and cites the City's Urban Water Management Plan (UWMP), which provides scenarios for anticipated water supply and demand, including availability to serve during normal, dry, and multiple dry years. As detailed further in Section 4.15, it was determined that the City would be able to meet the demand proposed by the Project and result in less than significant impacts (Draft EIR pages 4.15-19 through 4.15-22). No change or addition to the EIR's environmental analyses are required.

1-2 In summary, this comment states comments related to parking. The comment expresses support for Appendix J-2 of the Draft EIR's conclusion suggesting the following:

> "A before and after study could be conducted on the adjacent residential streets to understand if the project has an effect on street parking. Based on the results of the study and if desired by the City and the residents in the adjacent neighborhoods, a residential parking district could be implemented to deter non-residential users from parking on the street." (Appendix J-2 page 14)

Moreover, the comment correctly states impacts to parking are not within the scope of the environmental analysis as required by CEQA. Nevertheless, this suggestion to provide parking permits for residents and employees will be provided to City decision makers for their review and consideration.

Additionally, the commenter suggests the Project's future residents and users would not park in the proposed parking structure, stating the structure is too far from the proposed units. For clarification, each area within the Project site would provide parking spaces as shown in Table 3-2, Conceptual Site Plan and Specific Plan Buildout Summary, within Chapter 3, Project Description, of the Draft EIR. No change or addition to the EIR's environmental analyses are required.

1-3 This comment notes discussion within the Section 4.13, Transportation, of the Draft EIR which states five study intersections are projected to operate at a level of service (LOS) E or worse during AM or PM peak periods under Future Plus Project conditions (Draft EIR pages 4.13-19 and 4.13-20). Moreover, the comment suggests mitigation should be incorporated to reduce impacts.

As discussed in Draft EIR Section 4.13, Project improvements are planned for the eastbound lane of Mariposa Avenue at PCH (see Development Standard C.1 of the Specific Plan), which would be reconfigured as a part of the proposed Project, from one left lane and one through-right lane to one left, one through, and one right-turn lane. This infrastructure improvement has been taken into account for the plus-Project scenarios of the environmental analysis. The plus-Project scenarios of the impact analysis have also been analyzed without the Project improvement to show its potential benefit when compared to the baseline conditions (Draft EIR page 4.13-15). The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1 of the Draft EIR) (Draft EIR page 4.13-19).

However, the commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines. No change or addition to the EIR's environmental analyses are required.

Verbal Comment 2

Verbal Comment 2

Byron Washum
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

> I intend to provide written comments addressing parking and traffic impacts as well as the transformative change resulting from the project

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Response to Verbal Comment 2

Byron Washum
Individual
December 9, 2021

2-1 In summary, this comment states an intention to provide written comments addressing parking and traffic impacts as well as "transformative changes" resulting from the Project. Without specific comments related to the adequacy of the Draft EIR, no response is required.

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Verbal Comment 3

Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

> I am here on behalf of the Southwest Regional Carpenters union. We recommend hiring our members who live in the area to work on this and other projects, which helps to reduce impacts such as greenhouse gases. Our union helps provide a careers, training, a living wage and other benefits to local residents. 3-1

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Response to Verbal Comment 3

Ray Lawson
Southwest Regional Council of Carpenters
December 9, 2021

3-1 The commenter notes his representation with the Southwest Regional Carpenters union, and states hiring local members to work on the proposed Project would help reduce impacts to greenhouse gas emissions. The comment further details example benefits of the union. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Nevertheless, the comment will be provided to City decision makers for their review and consideration.

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Verbal Comment 4

Verbal Comment 4

Paul Morrison
421 Indiana Street
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live across from the proposed parking structure. 4-1

Displacement of residents

Table ES 1 in the environmental impact report which contains a summary of impacts states that the project will not displace a substantial number of people.

Noise and vibration will cause displacement

I believe that the project will have a lot of construction impacts such as noise, vibration, and air quality impacts from the use of heavy machinery, such as pile drivers and beams. As a result I and other nearby residents may be displaced by the project. The City may benefit economically from the project. I am a retired resident of 24 years. My rents today is very low. If I am displaced by the construction, I will be effectively banished from El Segundo because I will not be able to afford rent in the area after I return post construction. 4-2

The developer and the City have a moral obligation to long-term residents like myself. The City should consider mitigation for residents like me with lower incomes. Maybe we can revisit this project every six months or every year so we can track the potential impact on residents like myself. 4-3

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Response to Verbal Comment 4

Paul Morrison
Individual
December 9, 2021

4-1 This comment notes that he lives across for the proposed parking structure and expresses concerns with Project-related impacts, detailed below. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Please see Responses to Comments 4-2 through 4-3 for more discussion.

4-2 This comment raises concern for the displacement of residents due to construction-related impacts associated with noise, vibration, and air quality, which would displace nearby residents. The Draft EIR analyzed impacts related to noise and vibration as well as air quality within Sections 4.10, Noise and 4.2, Air Quality, respectively. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and air quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of the assumptions underlying the Air Quality Management Plan. However, construction-related impacts associated with these environmental topic areas are not applicable to Threshold 4.11(b) regarding displacement of "substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere." Displacement refers to the physical displacement of people or housing. As described in Draft EIR Section 4.11, Population and Housing, no housing uses are located on the Project site and Project implementation would not require demolition of existing housing or displace people or housing. Construction-related impacts associated with the Project would not physically displace residents surrounding the Project site. No change or addition to the environmental analysis found within the Draft EIR is required.

4-3 In summary, this comment states the Project Applicant and the City should consider mitigation for residents with lower incomes. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. Furthermore, impacts to rents, for example, are outside the scope of CEQA. Per Section 15064(e) of the State CEQA Guidelines, "economic and social changes resulting from a project shall not be treated as significant effects on the environment."

In conclusion, the comment suggests periodic evaluation of the potential impacts as a result of the proposed Project. In accordance with CEQA Guidelines Section 15097, to ensure that the mitigation measures identified in the EIR are implemented, the City must adopt a program for monitoring or reporting on the measures it has imposed to mitigate or avoid significant environmental effects. The "mitigation monitoring and reporting program" is monitored by the City to ensure that all mitigation measures have been implemented to the satisfaction of the City. Additionally, the comment regarding periodic evaluation will be provided to City decision makers for their review and consideration.

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Verbal Comment 5

Verbal Comment 5

Amalia Fuentes
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Indoor air quality

Referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations. 5-1

Diesel emissions

In addition to interior air quality impacts, the project will have diesel particulate matter impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold. 5-2

Greenhouse emissions

In addition, the environmental impact report has flaws in the calculations of greenhouse gas emissions from the project. 5-3

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Response to Verbal Comment 5

Amalia Fuentes
Supporters Alliance for Environmental Responsibility ("SAFER")
Individual
December 9, 2021

5-1 The commenter referenced a written letter that was submitted on April 12, 2021 that has substantial evidence of a significant health risk impact from indoor air quality issues. Case law determines that agencies should study impacts on projects' residents. Future residents of the project will be exposed to a cancer risk of 120/1,000,000. Project employees will be exposed to a cancer risk of 17.7/1,000,000. Both of these exceed the California environmental quality act threshold of 10/1,000,000. This assumes that all the material will meet air quality management district regulations.

Workers are not considered sensitive receptors under CEQA but are covered by the standards and protocols of the Occupational Health and Safety Administration (OSHA). Discussion of impacts on indoor air quality on future occupants of new construction is not specified or required by the City's CEQA Guidelines, State CEQA Guidelines, or California's air district guidelines. California air districts base their thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the state and federal ambient air quality standards (AAQS). The AAQS is based on maximum pollutant levels in outdoor air that would not harm the public's health. Furthermore, building materials are required to reduce exposure to toxic substances through compliance with the U.S. Environmental Protection Agency and the California Air Resources Board regulations, such as 40 CFR Part 770, Formaldehyde Emission Standards for Composite Wood Products. The regulations typically apply to manufacturers, distributors, importers, fabricators, and retailers of the products. All building materials used for the project would be required to comply with the applicable federal and state standards.

The Project (both nonresidential and residential uses) will need to comply with the 2019 CALGreen Code, which specifies that composite wood products (such as hardwood plywood and particleboard) meet the requirements for formaldehyde as specified in the California Air Resources Board's Air Toxic Control Measures. The 2019 CALGreen building code also does not allow added formaldehyde-based resins or ultra-low emitting formaldehyde resins and requires documentation of compliance with the California Air Resources Board's Air Toxic Control Measures. (See Section 5.504.4.5, Chapter 5, Part 11, 2019 California Green Building Standards Code, July 2019, incorporated herein by this reference.) Furthermore, the 2019 Title 24 standards increased the level of air filtration required for new residential construction, from minimum efficiency reporting value (MERV) 6 to MERV 13, per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), with the stated goal of reducing indoor $PM_{2.5}$ concentrations. To accommodate the higher efficiency filter requirements, the proposed changes would also require that return grilles be able to accommodate at least a 2-inch deep filter to ensure that MERV 13 filters can be installed with minimal impact on HVAC system performance. MERV 13 filters remove at least 90% of particles sized 3.0 and 10.0 microns, 85% of particles sized 1.0 to 3.0 microns, and 50% of particles sized 0.3 to 1.0 microns, which would minimize the potential for new residents to be exposed to substantial TAC and $PM_{2.5}$ emissions. Furthermore, building materials will be required to comply with the California Air Resources Board and 2019 CALGreen building code.

The commenter's conclusions were not based on the assumption that the Project would be built in accordance with CARB's Air Toxic Control Measures and 2019 CALGreen building code. The commenter provides no evidence to substantiate a contrary conclusion that in spite of the proposed Project using materials that comply with the standards of the CARB's Air Toxic Control Measures, the proposed Project would still expose occupants to toxic substances that results in exceeding the SCAQMD CEQA significance health risk threshold. No changes to the Draft EIR is required.

5-2 The commenter states the Project will have DPM impacts on sensitive receptors within 125 meters of the project site. These sensitive receptors will be exposed to a cancer risk of 79/1,000,000 which also exceeds the related threshold.

Construction health risks were evaluated in the Draft EIR using the EPA and SCAQMD refined model, known as American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD). This model takes into account meteorological data and topographical data. It also accounts for the geography of a project site, locations of emissions sources, the time of day emissions would occur, locations of sensitive receptors, and other factors, which represents the real world environment. Based on the construction HRA using this refined model, AERMOD, using AERMOD methodologies from the SCAQMD, and using the age sensitivity factors and other health risk evaluation parameters recommended by the SCAQMD and the Office of Environmental Health Hazard Assessment (OEHHA), health risk impacts were determined to be less than the SCAQMD significance thresholds for cancer risk and non-cancer chronic risk for DPM after implementation of MM-AQ-1, which would require the use of Tier 4 interim equipment for all construction equipment greater than 75 horsepower.

The analysis assumes a construction start date of October 2021, which represented the earliest date of construction when air quality and GHG assessments were initiated.[4] Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years. Tier 4 standards for engine horsepower between 11 horsepower and 75 horsepower were available starting in 2008. For engines with horsepower between 75 and 175, Tier 4 engines were available starting in 2012. For engine horsepower between 175 and greater than 1,200, Tier 4 engines were available starting in 2011. As such, equipment engines that meet Tier 4 emission standards are currently available at the time of this analysis, and would continue to be available during the Project's construction years (through 2024). Please refer to the US EPA's Nonroad Compression-Ignition Engines: Exhaust Emission Standards for details (available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1000A05.pdf).

Furthermore, an exemption from using Tier 4 equipment may be granted by the City of El Segundo if the Project proponent documents that equipment with the required tier is not reasonably available and provided corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment. For example, if a Tier 4 Interim piece of equipment is not reasonably available at the time of construction and a lower tier equipment is used instead (e.g., Tier 3), another piece of equipment would be replaced with an alternative-fueled (not diesel-fueled) equipment to offset the

[4] As explained in Section 4.2 of the Draft EIR, October 2021 represents the earliest possible start date. In practice, construction may begin at a later date. However, using an earlier start date for construction represents the worst-case scenario construction impacts, because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles.

emissions associated with using a piece of equipment that does not meet Tier 4 standards. As such, the use of the air quality modeling results is correct and is appropriately relied upon. The Draft EIR adequately evaluated the proposed Project's potential health risk impacts from construction and determined that they would be less than significant after implementation of MM-AQ-1.

Therefore, based on the above considerations the Draft EIR's health risk analysis is adequate as presented.

5-3 The commenter states that the Draft EIR has flaws in the calculations of GHG from the Project.

The SWRCC letter included similar assertions related to the Draft EIR's greenhouse gas emission analysis. See Comment Letter 1 (Response to Comment 1-29) in this document. As discussed in this response, the comment raised has been addressed and no new significant environmental impacts were raised that were not adequately addressed through the Draft EIR.

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Verbal Comment 6

Maria Barron
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

I live at 1628 E. Palm Ave. 6-1

Noise, pollution and parking

I concur with all the concerns that were mentioned by the previous speakers. I am concerned about noise, pollution, and parking. 6-2

Parking permits.

However, I disagree with the suggestion that the project residents should get the parking permits. Instead I think it will be best for existing residents in the area to have parking permits so they can park on the street. 6-3

Noise and pollution from the project will be unbearable for nearby residents. 6-4

The City previously had a program to provide double-paned windows to residents and my residence qualified for this program. However, the program ran out of funds. So, we won't be getting them. I recommend that the city revisit the program to provide a double-paned windows for residents. 6-5

I believe the project proposes too many apartment units and the proposed buildings and parking structures are too tall. 6-6

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Response to Verbal Comment 6

Maria Barron
Individual
December 9, 2021

6-1 This comment provided the resident's address, which is within the vicinity of the Project site. However, this comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required.

6-2 The comment expresses similar concerns as mentioned by other speakers related to noise, pollution, and parking. The comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. For informational purposes, the Sections 4.10 (Noise), 4.2 (Air Quality), 4.8 (Hydrology and Water Quality), and 4.13 (Transportation) address the aforementioned areas of concern. No further response is required.

6-3 This comment disagrees with the suggestion made by Nino Mascolo (see Response to Comment 1-2) regarding parking permits for Project residents. Instead, this comment suggests parking permits should be given to existing residents surrounding the Project site to allow for parking on the street. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-4 In summary, this comment states Project-related impacts associated with noise and pollution will be "unbearable" for nearby residents. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. As mentioned above, Sections 4.10 (Noise), 4.2 (Air Quality), and 4.8 (Hydrology and Water Quality) address the aforementioned environmental topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise, air quality, and hydrology and water quality were reduced to be less than significant with the exception of Threshold 4.2(a), where it was determined that there is no feasible mitigation measure for population growth in the context of assumptions used for the SCAQMD's Air Quality Management Plan. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-5 This comment notes a City program that provided double-paned windows to residents. However, the comment states the program ended and asks for the program to be restored. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No response is required. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

6-6 In summary, this comment states opposition to the Project's proposed residential unit count and proposed height. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

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Verbal Comment 7

Verbal Comment 7

Matthew Klemp
Resident
December 9, 2021

The following represents a transcription of verbal comments provided at the December 9, 2021 Planning Commission meeting:

Corner of Washington Street and Elm Avenue.

I previously submitted two letters commenting on the environmental impact report but I have not received a response other than that they will be included in the record. 7-1

My concerns related to noise, parking, and traffic.

The Environmental impact report makes some questionable key assumptions. A lot hinges on a lot of people walking to the downtown, or walking to mass transit, or taking mass transit. But that has not been the case here in El Segundo or in the Los Angeles area. It would be great if we had mass transit available, but it is not here. 7-2

Reduced parking requirements

In addition, a lot hinges on the assumption that two people living in one unit will use only a single car. That does not meet El Segundo's current parking standards. In addition, no one really walks from Pacific Coast Highway to downtown El Segundo. In addition, traffic on Mariposa Avenue is backed up especially when making a left turn onto Pacific Coast Highway. So, the additional traffic will make things worse on Mariposa Avenue. In addition, the environmental impact report excludes single-family homes from the sensitive receptors of unwanted noise. 7-3

High density and traffic/parking

The project brings high density residential to this neighborhood that already has a parking and traffic problem. Adding all those units in this small area will make park parking and traffic is much worse 7-4

Alternative sites.

Why can't we rezone somewhere else in the city to accommodate all these new residents. 95% of residents in the city live in approximately 25% of the city's area. South of Grand Avenue and east of Pacific Coast Highway would be appropriate places to rezone and would take away a lot of the objections to the project if those alternative site where evaluated and developed. 7-5

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Response to Verbal Comment 7

Matthew Klemp
Individual
December 9, 2021

7-1 In summary, this comment states he lives nearby the Project site. In addition, the commenter notes two previously submitted letters on the Draft EIR but states no response other than they would be included in the administrative record was made. Please see Response to Comment I-21 within Chapter 2, Responses to Comments, of the Final EIR for more discussion on previously submitted comments from "Matthew Klemp".

Additionally, the comment expresses concern related to noise, parking, and traffic. The Draft EIR analyzed Project-related impacts in accordance with the State CEQA Guidelines and existing relevant plans, policies, and programs. Sections 4.10 (Noise) and 4.13 (Transportation) address the aforementioned topics of concern. Impact determinations are summarized in Table ES-1 as mentioned previously. If impacts were determined to be potentially significant, mitigation was incorporated to reduce impacts to a less-than-significant level. All thresholds of significance for noise and transportation were reduced to be less than significant. This comment does not express specific concerns related to the adequacy of the Draft EIR's environmental analysis. No further response is required.

7-2 In summary, this comment questions the Draft EIR's assumptions of walkability and transit of current and future residents and visitors of the city. The following response includes portions of Response to Comment Letter I-21 (included within Chapter 2, Responses to Comments, of the Final EIR):

The EIR evaluates the environmental impacts of the proposed Project based on the existing conditions of the Project site and area; applicable standards that are in place at the local, regional, state, and national levels; and, conservative assumptions based on default data from similar project types. While the availability of transit and the mixed-use nature of the Project and its surroundings may present a potential environmental benefit and are features discussed in the EIR, the environmental conclusions in the EIR do not hinge upon widespread use of alternative transport modes amongst the future residents, employees, guests, and visitors of the proposed Project. Rather, the analysis assumes that a majority of the future residents, employees, guests, and visitors would use single-occupancy vehicles.

Regarding the Project's proximity to downtown El Segundo, the distance is approximately 1.5 miles, which equates to an approximately 30-minute walk. While the potential for walking to downtown is mentioned in the EIR and is set forth as part of one of the Project objectives, the analysis in the EIR is not based on the potential for future Project residents to walk to downtown El Segundo. Rather, a conservative trip credit for alternative transport modes was taken for the purposes of the Project's vehicle trip calculations. The trip credit is minimal (5% of the Project's total vehicle trips) and is based on the mixed-use nature of the Project and Project area, combined with proximity to transit.

The analysis in the EIR assumes that 5% of the Project trips would take transit, walk, or bike. However, U.S. Census data from 2019 shows that 6.7% of residents in El Segundo take transit, walk, or bike. As such, data collected in the Project area indicates that the assumptions in the EIR analysis for use of alternative transportation modes are conservative in nature and that the EIR assumes reduced use of alternative transportation modes relative to current rates of use in the surrounding community. While

the EIR describes the transit-oriented nature of the proposed Project and its proximity to existing businesses and services, the quantitative analyses (e.g., traffic generation, traffic-related noise generation) remain conservative with respect to vehicle use versus alternative transportation use. Furthermore, no additional walk/bike/transit trip generation credit was taken in the Draft EIR for the Project's proximity to Downtown El Segundo.

The comment also states that there is a lack of reliable transit in the Los Angeles area. However, the Metro C Line Mariposa Station is 0.51-mile from the Project site. Metro Line 232, LADOT Commuter Express Line 574, and Beach Cities Transit Line 109 also run along Pacific Coast Highway with stops near the Project site. Metro C Line Mariposa Station is considered to be within walking distance of the Project site (see Appendix J-1 of the Draft EIR). The distance between the Project site and the Mariposa Station equates to an approximately 12-minute walk. Metro Route 232 has average headways of 20 minutes during weekday morning peak periods and 30 minutes during weekday afternoon peak periods (Draft EIR, Appendix J-1). Furthermore, to provide a better bus system for Los Angeles County, the NextGen Bus Plan was approved in October 2020 by Metro. Service improvements are planned for Metro Route 232 to provide a 15-minute frequency during peak hours. Nevertheless, as described above, the trip credits taken in the EIR analysis for transit use are conservative with respect to existing reliance on transit, walking, and bicycling in the surrounding community.

Finally, the Project site is adjacent to a transit-priority area, which is an area delineated by SCAG to identify locations where transit use is practical and where transit-oriented development is encouraged. Plans and policies are in place at the local, regional, and state level to encourage increased use of alternative modes of transportation and to support mixed-used and higher density housing near transit. The proposed Project is supportive of these policies, as it would locate higher density housing and mixed-use development in proximity to transit. As these plans and policies are carried out, the use of alternative modes of transportation is also expected to increase over time, particularly in urbanized areas.

7-3 In summary, this comment questions the Draft EIR's assumptions of vehicles per unit for future residents of the proposed Project. The proposed Project includes an adequate amount of parking and would provide parking garages for the on-site residents, hotel guests, employees, and restaurant/retail patrons. Because the proposed Project would provide sufficient parking, and because parking adequacy is not considered an impact on the environment, no parking-related mitigation measures are required under CEQA. While CEQA does not require an analysis of parking, a parking evaluation was nevertheless included as part of the Draft EIR for informational purposes and in response to community concerns For more information, please see Section 4.13.4 of the Draft EIR and Appendix J-2 of the Draft EIR. No change or addition is required of the Draft EIR's environmental analysis. Nevertheless, this comment will be provided to City decision makers for their review and consideration.

Additionally, the comment asserts walkability assumptions within the Draft EIR. For more discussion on walkability, please see Response to Comment 7-2, above.

The comment also raises concerns for traffic congestion on Mariposa Avenue and Pacific Coast Highway. The commenter's concern for traffic congestion is no longer considered an environmental topic of concern under CEQA (California Public Resources Code Section 21099(b)(2)). The Draft EIR includes information on intersection operations and congestion level of service (i.e., LOS) for informational purposes only. The analysis is included as it relates to the applicability of General Plan policies (see Draft EIR, Section 4.13 and Appendix J-1). Although, automobile delay and traffic

congestion are not considered to be impacts on the environment, analysis was prepared related to the Project's consistency with Section 15064.3(b) of the State CEQA Guidelines.

Finally, the comment asserts the Draft EIR excludes single-family homes as sensitive receptors to noise. This comment is similar to Comment I21-8 (included within Chapter 2, Responses to Comments, of the Final EIR). The comment incorrectly states that single-family homes were not included in the noise analysis for the Draft EIR. As noted in Section 4.10, Noise, of the Draft EIR:

> "Additional sensitive receptors are located farther from the Project site in the surrounding community, such as single-family residences west of Washington Street, and due to this increased distance (over 500 feet from the Project boundary), those receptors would be less impacted by noise and vibration levels than the above-listed sensitive receptors" (Draft EIR pages 4.10-5 and 4.10-6).

Therefore, single-family homes were not excluded from the Draft EIR as noise-sensitive receptors; the nearest sensitive receptors are analyzed to provide the most conservative analysis. No change or addition is required of the Draft EIR's environmental analysis.

7-4 In summary, this comment states opposition to the Project's proposed density, trip generation, and parking. The comment asserts the proposed Project would exacerbate existing parking and traffic conditions. For discussion on the Project's impacts to parking and traffic, see Response to Comment 7-3, above. The commenter's general opposition to the Project will be provided to the City's decision makers for their review and consideration.

7-5 In summary, this comment states alternative sites should be considered for the proposed Project. This comment is similar to Comment I21-12 (included within Chapter 2, Responses to Comments, of the Final EIR). As such, following response includes portions of Response to Comment I21-12:

Alternatives to the proposed Project, including alternate locations, are evaluated in Chapter 6 of the Draft EIR. Alternate locations to the proposed Project site were ultimately rejected as infeasible. The reasons for this conclusion are summarized below, followed by a description as to why the commenter's specific suggestions for alternate locations are determined to be infeasible.

Infeasibility of Alternate Locations

1) Alternate locations would not avoid or reduce the Project's environmental impacts. As stated in Section 15126.6(f)(2)(A) of the CEQA Guidelines, the key question and first step in analyzing alternative sites is whether any of the significant effects of a project would be avoided or substantially lessened by putting that project in another location. Only locations that would avoid or substantially lessen any of the significant effects of a project need to be considered in the EIR. There are no significant and unavoidable impacts associated with the proposed Project that relate to the location of the Project site, and development of the Project on another site in the City is not likely to lessen or avoid the environmental impacts that require mitigation. Rationale for this determination is provided in Section 6.4 of the Draft EIR.
2) No known sites are available within the City of an approximately equivalent size to the Project site that could be redeveloped with a mixed-use, hotel, commercial, and residential development. One of the factors for feasibility of an alternative, as defined in the CEQA

Guidelines, is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." The City evaluated the possibility for other sites, and this evaluation is summarized in Section 6.4 of the Draft EIR. The City determined that potential alternate locations were not suitable due to a variety of factors (land use designations, hazardous site conditions, and/or property ownership.)

Suggested Alternate Locations

The commenter's specific suggestions for alternate locations are addressed as follows:

- **East of Pacific Coast Highway or south of Grand Avenue.** The commenter suggests developing the proposed Project on the east side of Pacific Coast Highway and/or to the south of Grand Avenue. The commenter presents the option of rezoning a site on the east side of Pacific Coast Highway to accommodate mixed-use residential. As stated in Section 6.4 of the Draft EIR, development of the Project on another site along Pacific Coast Highway could provide a transition from the City's offices to the east and residential uses to the west, similar to the proposed Project site. However, other sites along Pacific Coast Highway were determined to be infeasible because no such sites are under control by the Project applicant, which is a factor for feasibility under CEQA. Additionally, other sites along Pacific Coast Highway may not be considered by the City to be appropriate for the increased height and density that is proposed for the Project. Furthermore, locating residential uses east of Pacific Coast Highway would place new residents farther away from services and amenities, such as parks, City Hall, the police station, and schools. This may result in increased vehicle trips within the City and/or increased development impacts, in the event that new public services and amenities need to be developed elsewhere in the City. Residents would also be required to cross Pacific Coast Highway to access public services, which could present increased traffic safety effects. The City did consider a parcel located near Pacific Coast Highway and Rosecrans Avenue, between The Point Shopping Center and Plaza El Segundo. However, the parcel is between two sets of railroad tracks and is contaminated due to historic heavy industrial uses. Further, the former owner, Chevron, recorded restrictions on most of the properties in this area to prohibit residential and hotel uses. In general, the areas south of Grand Avenue are highly industrialized, and adding residences to this area would likely introduce an incompatible land use.

In conclusion, the City acknowledges the comment and it will be provided to City decision makers for their review and consideration.

3 Changes to the Draft EIR

3.1 Introduction

The comments received by Pacific Coast Commons Specific Plan during the public review period for the Draft EIR included information that has resulted in several minor revisions to the text of the Draft EIR. Additionally, typographical errors have been identified in the Draft EIR. These revisions are shown below and are categorized by section number and page number. Errors which require multiple revisions throughout the Draft EIR are categorized at the beginning of Section 3.2, Errata, below, with a summary of the change and subsequent section number and page number provided. Text from the Draft EIR that has been removed is shown in bold strikethrough (i.e., ~~**strikethrough**~~), and text that has been added as part of the Final EIR is shown as bold underlined (i.e., **underline**). Revisions are shown with surrounding sentences for context. These errata merely clarify and corrects minor facts and does not constitute "substantial revisions" requiring recirculation of the Draft EIR, as set forth in CEQA Guidelines, Section 15073.5.

3.2 Errata

California Building Code Reference

The following are typographical revisions where the year referenced for a citation of the California Building Code was erroneously recorded as "2016" rather than "2019".

Section 4.1, Aesthetics, Page 4.1-7

City of El Segundo Municipal Code

The California Building Code, ~~**2016**~~**2019** edition, published at Title 24, Part 2, of the California Code of Regulations, including Appendices F, H, and I, and is adopted by reference pursuant to Chapter 13-1-1 of the City of El Segundo Municipal Code (ESMC).

Section 4.5, Geology and Soils, Page 4.5-10

City of El Segundo Municipal Code

The California Building Code, ~~**2016**~~**2019** edition, published at CCR Title 24, Part 2, including Appendices F, H, and I, and is adopted by reference pursuant to Chapter 13-1-1 of the El Segundo Municipal Code (ESMC).

Pacific Coast Commons Design Package Reference

The following are typographical errors in the citation of the Pacific Coast Commons Design Package, which have been corrected throughout the EIR for consistency.

Chapter 2, Environmental Setting, Section 2.6, References, Page 2-9

Withee Malcom Architects. 2020. "Pacific Coast Commons Design Package." ~~September 17, 2020~~January 2021

Chapter 3, Project Description, Section 3.3.3, Conceptual Site Plan, Page 3-11

Source: ~~Withee Malcom Architects~~Pacific Coast Commons Specific Plan ~~2020~~2021; Appendix B

Street Name Clarification

The intersection noted for the Pacific Corporate Towers is improperly referenced as "Lincoln and Grand Avenues." Lincoln Avenue is not a street located in the City of El Segundo. As a result, the street cited as Lincoln Avenue has been revised to Pacific Coast Highway, as shown below.

Section 4.3, Cultural Resources, Section 4.3.1, Existing Conditions, Subsection Historic Period Overview, Historical Overview of El Segundo, Page 4.3-4

Beginning in the 1980s, commercial and office buildings began to appear along Sepulveda Boulevard, between Grand Avenue and El Segundo Boulevard. In 1980, a large business park on the northeast corner of Grand Avenue and Sepulveda Boulevard (Pacific Coast Highway) was established with three large, concrete and tinted-glass buildings. One of the most notable developments was the construction of the Pacific Corporate Towers at ~~Lincoln~~Pacific Coast Highway and Grand Avenue~~s~~, built in 1983. That same year, 144 additional commercial properties were built in El Segundo, totaling over 1 million square feet of commercial space. In 1990, toy company, Mattel, moved its world headquarters to El Segundo, also just off Sepulveda Boulevard. In the late 1990s, strip malls with anchoring groceries stores filled in the remaining available space along Sepulveda Boulevard (Appendix D).

Appendix D, Cultural Resources Technical Report, Historical Overview of El Segundo, Pages 34 and 35

Beginning in the 1980s, commercial and office buildings began to appear along Sepulveda Boulevard, between Grand Avenue and El Segundo Boulevard. In 1980, a large business park on the northeast corner of Grand Avenue and Sepulveda Boulevard (Pacific Coast Hwy) was established with three large, concrete and tinted glass buildings. One of the most notable developments was the construction of the Pacific Corporate Towers at ~~Lincoln~~Pacific Coast Highway and Grand ~~Avenues~~Avenue, built in 1983. That same year, 144 additional commercial properties were built in El Segundo, totaling over 1 million square feet of commercial space. In 1990, toy company, Mattel, moved its world headquarters to El Segundo, also just off Sepulveda Boulevard. In the late 1990s, strip malls with anchoring groceries stores filled in the remaining available space along Sepulveda Boulevard (Commercial Café 2020; El Segundo Chamber of Commerce 2017).

Zone Text Amendment Section Number

Subsequent to the release of the Draft EIR for public review, the City of El Segundo adopted the Lakes Specific Plan, which was codified as Section 15-3-2(A)(11) of the El Segundo Municipal Code (ESMC). The following are required

typographical revisions in the Draft EIR to correct the assumed Zone Text Amendment ESMC section, if the proposed Project is approved by the City.

Chapter 1, Introduction, Page 1-5

- Approval of a General Plan Amendment (No. GPA 19-01) to change the Land Use Designation from "General Commercial" and "Parking" to "Pacific Coast Commons Specific Plan (PCCSP)" with an accompanying Land Use Map change.
- Zone Text Amendment (No. ZTA 19-08) to add a new El Segundo Municipal Code (ESMC) Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)."
- Zone Change (No. ZC 19-01) to rezone the property from "General Commercial (C-3)" and "Parking (P)" to "Pacific Coast Commons Specific Plan (PCCSP)" and an accompanying Zoning map change.

Chapter 3, Project Description, Page 3-20

- Zone Text Amendment (No. ZTA 19-08) to add a new El Segundo Municipal Code (ESMC) Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)."
- Zone Change (No. ZC 19-01) to rezone the property from "General Commercial (C-3)" and "Parking (P)" to "Pacific Coast Commons Specific Plan (PCCSP)" and an accompanying Zoning map change.

Section 4.9, Land Use and Planning, Page 4.9-33

Amendments to the Zoning Code

As described in Section 3.7, Discretionary Actions, in Chapter 3 of this Draft EIR, the Project requests a Zone Text Amendment No. ZTA 19-08 to add a new ESMC Section 15-3-2(A)(~~11~~12) "Pacific Coast Commons Specific Plan (PCCSP)". As such, the Project would be required to follow the procedures outlined in Section 4.9.2, above. Approval of the proposed Project, in accordance with the provisions outlined in Title 15 of the ESMC, would ensure compliance with applicable zoning standards. Additionally, through the application process, the City would thoroughly review all plans for the proposed Project to ensure compliance with the ESMC, and other relevant plans, policies, and regulations.

Chapter 1, Introduction

Section 1.4.1, City of El Segundo, Page 1-5

The last item listed on the discretionary actions the City will consider as part of the proposed Project should be deleted as the dedications are being provided now.

- Shared Parking Agreement in conjunction with the Parking Demand Study and Shared Parking Analysis, to replace the previous approval of Off-Site Parking Covenant Nos. MISC 14-03 and MISC 14-06.
- Reciprocal Access Agreements for driveways and drive aisles accessing multiple parcels.
- Street dedication waiver requests for a portion of the dedication requirements for Mariposa Avenue and Indiana Street. ~~Future street dedication for Holly Avenue and Palm Avenue would be provided through irrevocable offers to dedicate land.~~

Chapter 2, Environmental Setting

Section 2.5, Cumulative Projects, Page 2-8

The following is a revision to Table 2-3, List of Cumulative Projects, from the Draft EIR.

Table 2-3. List of Cumulative Projects

Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size
1	2101 Pacific Coast Highway	No	Office	10.12	KSF
2	2205 N. Sepulveda Boulevard	No	General Office	4.70	KSF
		Yes	Existing Hair Salon	1.04	KSF
3	2100 E El Segundo Boulevard	Yes	Office	1751.92	KSF
			Warehouse	73.58	KSF
			Industrial	168.00	KSF
			Retail	148.96	KSF
4	305 S. Sepulveda Boulevard, 330 S. Sepulveda Boulevard, Hermosa Beach Sites	No	Design Center	100.30	KSF
			Executive Offices	19.21	KSF
			General Office	57.50	KSF
			Existing Office	8.42	KSF
5	750 South Douglas Street	Yes	Industrial	4.99	KSF
6	1000 N Sepulveda Boulevard	No	Supermarket	27.50	KSF
			Restaurant	52	Seats
			Bank	7.00	KSF
			Existing Auto Center	32.72	KSF
7	3200–3600 N. Sepulveda Boulevard	No	Shopping Center	110.00	KSF
8	3920 Highland Avenue	No	Condominium	2	DU
			Studio	3.00	KSF
9	540 E Imperial Avenue	Yes	Residential	58	DU
10	400 Duley Road	Yes	Medical Office	63.54	KSF
11	123 Nevada Street	Yes	Office	15.00	KSF
12	2125 Campus Drive	Yes	Office	153.53	KSF
13	140 Sheldon Street	Yes	Office/warehouse	7.12	KSF
			Existing Industrial	1.76	KSF
14	740 Pacific Coast Highway	No	Drive-thru Restaurant	5.00	KSF
			Existing Bank	8.10	KSF
15	500 S Douglas & 2330 Utah Avenue	Yes	General Office	78.00	KSF
16	1700 East Imperial Avenue	Yes	Office	86.52	KSF
17	445 N. Douglas Street	Yes	Office	155.66	KSF
18	455 Continental Boulevard & 1995 E Grand Avenue	Yes	Office	300.00	KSF
19	700–860 PCH; 2001–2015 E. Park Place; 700–740 Allied Way	Yes	Shopping Center	18.85	KSF
20	1301 El Segundo Boulevard	Yes	Office	6.274	KSF
			Warehouse	5.88	KSF
21	400 Pacific Coast Highway	Yes	Driving Range	65.00	KSF
			Existing Golf Course	2.50	KSF
22	2021 E Rosecrans Avenue	Yes	Office	240.00	KSF

Table 2-3. List of Cumulative Projects

Location ID	Cumulative Project Location	Within City Limits	Land Use/Project Type	Unit	Size
			Studio and Production	66.00	KSF
			Retail	7.00	KSF
23	140 Oregon Street	Yes	Office	70.00	KSF
24	401–615 Pacific Coast Highway (Project Site)	Yes Yes	Residential	263	DU
			Retail	11.00	KSF
25	212 Eucalyptus Drive	Yes	Office	13.49	KSF
			Restaurant	0.63	KSF
			Existing Waterhouse	5.35	KSF
26	2221 Park Place	Yes	Office	27.48	KSF
27	1225 Mariposa Avenue	Yes	Condominium	15	DU
			Existing Residential	5	DU
28	14500 Aviation Boulevard	No	Credit Union	3.60	KSF
29	11416 Inglewood Avenue	No	Condominium	13	DU
30	5151 El Segundo Boulevard	No	Hotel	129	Rooms
31	1475 El Segundo Boulevard	Yes	Office	47.84	KSF
			Residential	4	DU
32	1320-1330 Franklin Avenue	Yes	Office	47.25	KSF
			Residential	4	DU
33	243 and 330 Kansas Street	Yes	Office	243.22	KSF

Source: Appendix J-1
DU = dwelling unit; KSF = thousand square feet

Figure 2-5, Cumulative Project Location Map, Page 2-19

The following is a revision to Figure 2-5, Cumulative Project Location Map, which provides an illustration of the City's related projects with the addition of three related projects (Location ID 31, 32, and 33).

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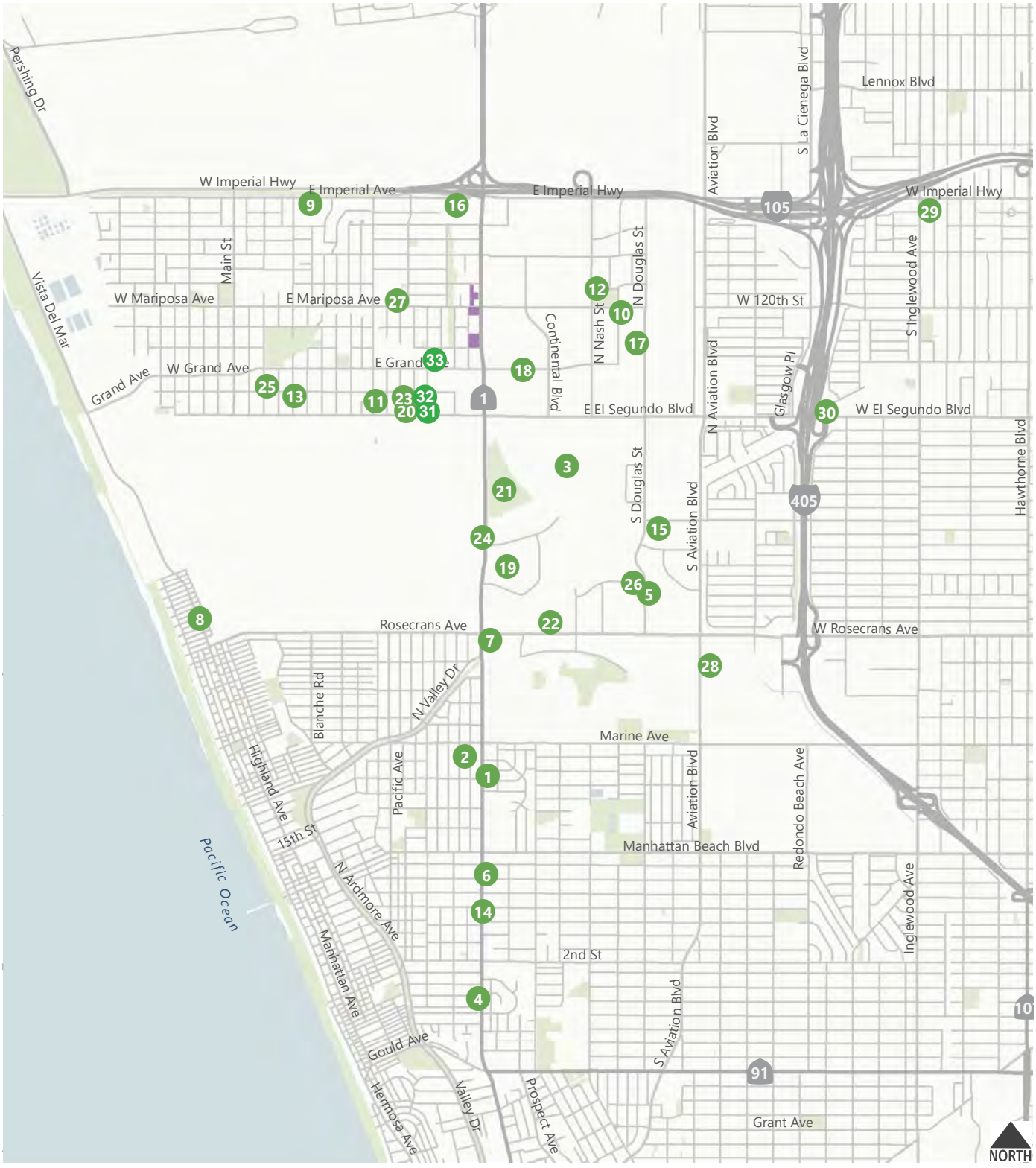

Project Site

Related Project

SOURCE: Fehr and Peers, 2021

FIGURE 2-5

Cumulative Project Location Map

Pacific Coast Commons Specific Plan EIR Project

DUDEK

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Chapter 3, Project Description

Section 3.3.1, Land Use Plan, Subsection Circulation Plan, Vehicular Circulation, Pages 3-7 through 3-9

Information regarding a new right-turn lane on Mariposa Avenue has been included for clarity with reference to another section in Chapter 3, Project Description, of the Draft EIR.

Development within the Specific Plan site would also provide infrastructure and facilitate access for various modes of travel including automobiles, bicycles, and pedestrians. Pedestrian and handicap access would be provided between buildings and to public sidewalks on the five street frontages along the site. Proposed improvements associated with the adjacent roadways are summarized below.

- **Pacific Coast Highway.** PCH is a California Department of Transportation (Caltrans) facility and an existing public major arterial street that abuts the property on its eastern edge. No other right-of-way improvements are proposed as part of the development allowed in the Specific Plan. No additional curb cuts besides the three existing curb cuts that provide access to the two existing hotels may be allowed along PCH in the Specific Plan area. The two existing driveways that access the north parking lot at 629 North PCH would be removed.
- **Mariposa Avenue.** Mariposa Avenue is an existing public two-lane collector street that abuts the property between the northern and southern blocks of the Specific Plan area. Some additional right-of-way improvements **(i.e. new right-turn lane on Mariposa Avenue; see below under Section 3.3.6, "Off-Site Improvements", on page 3-16)** are required as a result of the development allowed in the Specific Plan. A waiver is requested for a portion of the street dedication requirements on the south side of Mariposa Avenue. No additional curb cuts besides the one existing curb cut on the north side of the street (which also serves as a fire lane) may be allowed along the north side of Mariposa Avenue in the Specific Plan area. No curb cuts may be allowed along the south side of Mariposa Avenue within the Specific Plan area.

Section 4.2, Air Quality

Introduction, Page 4.2-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing air quality conditions of the Pacific Coast Commons Specific Plan Project (Specific Plan or Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures, level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's criteria air pollutant emissions from both construction and operations. In addition, a Health Risk Assessment (HRA) was performed to determine the potential cancer risk and non-cancer health impacts to existing sensitive residential receptors in proximity to the proposed Project due to toxic air contaminant (TAC) emissions from construction activities using the American Meteorological Society/Environmental Protection Agency Regulatory Model

(AERMOD) Version 19191 and the Hotspots Analysis and Reporting Program Version 2 (HARP2). For the relevant data, refer to the following appendix:

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Construction Emissions, Page 4.2-24

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Emissions from the construction phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on CalEEMod default values, which were adjusted to more accurately reflect long-term buildout of the proposed Project.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Page 4.2-27

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Emissions from the construction phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Construction scenario assumptions, including phasing, equipment mix, and vehicle trips, were based on CalEEMod default values, which were adjusted to more accurately reflect long-term buildout of the proposed Project.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Page 4.2-27

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA ~~2017~~2021). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For parking lot land uses, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Area Sources, Pages 4.2-27 and 4.2-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the VOC evaporative emissions from application of residential and nonresidential surface coatings based on the VOC emission factor, the building

square footage, the assumed fraction of surface area, and the reapplication rate. The proposed Project would use low VOC paint in construction and regular maintenance activities. Low VOC paint is generally considered to contain less than 50 grams of VOC per liter, which was assumed for both interior and exterior painting. Consistent with CalEEMod default values, a VOC content of 100 was assumed for the parking structures. The model default reapplication rate of 10% of area per year is assumed. Consistent with CalEEMod defaults, it is assumed that the residential surface area for painting equals 2.7 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For nonresidential land uses (e.g., retail, community, and commercial areas), it is assumed that the surface area for painting equals 2.0 times the floor square footage, with 75% assumed for interior coating and 25% assumed for exterior surface coating. For the parking garage, the architectural coating area is assumed to be 6% of the total square footage, consistent with the supporting CalEEMod studies provided as an appendix to the CalEEMod User's Guide (CAPCOA ~~2017~~2021).

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days (CAPCOA ~~2017~~2021). By design, the proposed Project would limit turf, and the proposed landscaped area would be minimal and any landscape equipment used is anticipated to be powered by electricity, when needed. Nonetheless, emissions associated with potential landscape maintenance equipment were included and no emission reduction features related to electric landscape equipment was assumed to conservatively capture potential Project operational emission sources.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Energy Sources, Page 4.2-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

The energy use from nonresidential land uses (natural gas usage per square foot per year) is calculated in CalEEMod based on the California Commercial End-Use Survey database. CalEEMod default values for both residential and nonresidential land uses energy consumption were revised. CalEEMod assumes compliance with the ~~2016~~2019 Title 24 Building Energy Efficiency Standards~~. The default values were updated to reflect the more stringent 2019 Title 24 Building Energy Efficiency Standards~~, which became effective on January 1, 2020. Per the CEC Impact Analysis for the 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings, the first-year savings for newly constructed non-residential buildings, are 197 gigawatt hours of electricity, 76.6 megawatts of demand, and 0.27 million therms of gas, representing reductions from the 2016 Title 24 standard of 10.7%, 9%, and 1%, respectively. The first-year savings for multi-family buildings are 91 gigawatt hours, 4.1 megawatts of demand, and 0.25 million therms of gas. On a percent savings basis compared to the prior 2016 standards, the multi-family, savings are 2% of electricity, 8% of demand and 5% of gas.

Section 4.2.3, Thresholds of Significant, Approach and Methodology, Operational Emissions, Mobile Sources, Page 4.2-29

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-7. Project Trip Rate Assumptions

Land Use	CalEEMod Land Use Surrogate	Revised Trip Rate		
		Weekday	*Saturday*	*Sunday*
Residential Units	Apartments Mid-Rise	5.16	~~4.96~~ 4.66	~~4.55~~ 3.88
Commercial/Retail	Regional Shopping Center	~~35.89~~ 36.02	~~42.00~~ 44.00	~~20.13~~ 20.13
Fast Casual Restaurant	High Turnover Sit Down Restaurant	~~239.73~~ 239.73	~~261.57~~ 261.57	~~248.57~~ 304.82

Source: Appendix C-1.

Section 4.2.4, Impact Analysis, Threshold 4.2b, Construction Emissions, Page 4.2-34

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-9. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOCs	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2021	~~4.15~~ 4.11	~~41.60~~ 41.22	~~25.54~~ 25.66	0.06	~~3.48~~ 3.51	~~2.61~~ 2.62
2022	~~2.32~~ 2.26	~~21.97~~ 21.55	~~21.45~~ 21.45	~~0.05~~ 0.04	~~2.36~~ 2.37	~~1.31~~ 1.32
2023	~~49.34~~ 3.09	~~29.16~~ 28.57	~~27.05~~ 27.63	~~0.08~~ 0.07	4.47	2.13
2024	~~49.34~~ 49.05	~~18.18~~ 16.37	~~27.18~~ 27.73	0.07	4.52	~~1.60~~ 1.61
Maximum daily emissions	~~49.34~~ 49.05	~~14.60~~ 41.22	~~27.18~~ 27.63	~~0.08~~ 0.07	4.52	~~2.61~~ 2.62
SCAQMD threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
VOCs = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
These emissions reflect CalEEMod "mitigated" output, which accounts for compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

Section 4.2.4, Impact Analysis, Threshold 4.2b, Operational Emissions, Page 4.2-35

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-10. Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
Area	~~8.23~~ 8.49	4.18	23.43	0.03	0.44	0.44
Energy	0.12	1.00	0.53	~~<0.01[a]~~ 0.01	0.08	0.08
Mobile	~~3.12~~ 5.93	~~13.94~~ 5.38	~~29.83~~ 45.96	~~0.12~~ 0.09	~~10.00~~ 10.03	~~2.73~~ 2.72
Project Total	~~11.47~~ 14.54	~~19.12~~ 10.56	~~53.79~~ 69.92	~~0.15~~ 0.13	~~10.52~~ 10.55	~~3.25~~ 3.24
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Appendix C-1 for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
~~[a] <0.01 = value less than reported 0.01 pounds per day.~~

Section 4.2.4, Impact Analysis, Threshold 4.2a, Operational Emissions, Pages 4.2-35

The following revised text clarifies the level of significance for the proposed Project's operational cumulative impacts.

As shown in Table 4.2-10, the combined daily area, energy, mobile, vehicle testing, and off-road emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with Project-generated operational criteria air pollutant emissions would be less than significant.

Air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD. The maximum daily PM_{10} and $PM_{2.5}$ emissions would not exceed the significance thresholds during proposed Project construction activities. Fugitive dust, as well as vehicle and equipment exhaust, generated during Project construction would contribute to the SCAB's nonattainment designation for PM_{10} and $PM_{2.5}$; however, this contribution would not be considered cumulatively considerable.

With regard to operational cumulative impacts associated with nonattainment pollutants, ~~in general, if a project is consistent with the community and/or general plans, it has been accounted for in the attainment demonstration contained within the state implementation plan and would therefore not cause a cumulatively significant impact on the ambient air quality. As addressed in the first impact criterion, the proposed Project would be consistent with the growth projections anticipated in SCAQMD's 2016 AQMP.~~ project-level thresholds of significance for criteria pollutants are relevant in the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality. Projects that exceed the SCAQMD project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. As presented in Table 4.2-10, the proposed Project's operational emissions would not exceed the SCAQMD significance thresholds. Accordingly, the proposed Project would not result in a cumulatively considerable contribution to the nonattainment pollutants in the SCAB.

Based on the preceding considerations, the proposed Project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction and operation.

Section 4.2.4, Impact Analysis, Threshold 4.2c, Localized Significance Threshold, Page 4.2-37

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.2-11. Localized Significance Thresholds Analysis for Project Construction

Maximum On-Site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day			
Construction emissions	~~40.50~~ 27.52	~~21.15~~ 18.24	~~2.80~~ 1.58	~~2.44~~ 1.23
SCAQMD LST	91	664	5	3
LST exceeded?	No	No	No	No

Source: SCAQMD 2008.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Appendix C-1, Construction (Summer) and Construction (Winter) output, for complete results.
Localized significance thresholds are shown for 1-acre project sites corresponding to a distance to a sensitive receptor of 25 meters. These estimates implementation of the proposed Project's fugitive dust control strategies, including watering of an active site two times per day.

Section 4.2.8, References, Page 4.2-42

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA. ~~2017~~2021. *California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0* Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. ~~October 2017~~May 2021. http://www.caleemod.com.

Section 4.4, Energy

Introduction, Page 4.4-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing energy conditions of the Pacific Coast Commons Specific Plan (Specific Plan or Project) vicinity, identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's energy consumption from both construction and operations. For the relevant data, refer to the following appendix:

Section 4.4.3, Thresholds of Significance, Approach and Methodology, Page 4.4-13

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CalEEMod Version ~~2016.3.2~~2020.4.0 (CAPCOA ~~2017~~2021) was used to estimate the potential proposed Project-energy consumption during construction and operation. Construction of the proposed Project would result in petroleum consumption primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details specific to construction and operation are discussed in Section 4.2, Air Quality, specifically in Approach and Methodology (Construction Emissions and Operational Emissions), are also applicable for the estimation of construction-related energy consumption. Potential energy consumption from proposed Project operations were estimated for area sources (landscape maintenance), energy sources (natural gas and electricity), mobile sources, solid waste, and water supply and wastewater treatment. Construction of the proposed Project is anticipated to commence in July 2021 and reach completion in April 2024, lasting a total of 34 months. Additional details from each category are discussed in the Air Quality section, in Section 4.2.3.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Electricity, Operations, Pages 4.4-13 and 4.4-14

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

The operational phase would require electricity for multiple purposes including building heating and cooling, lighting, appliances, electronics, and water and wastewater conveyance. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), CalEEMod default values for electricity consumption for the proposed Project's land uses were ~~revised to account for compliance with the~~used, which reflects compliance with the 2019 Title 24 standards. ~~It was assumed that multi-family residential savings are 2% of electricity from the 2016 standards. For non-residential buildings, the savings are 10.7% of electricity.~~ Table 4.4-1 presents the anticipated electricity demand for the proposed Project.

Table 4.4-1. Operational Electricity Demand – Proposed Project

Land Use	kWh/Year
Building and Lighting Electricity Demand	
Residential	~~1,044,560~~ 1,008,300
Retail	~~81,249~~ 84,054
Fast Casual Restaurant	~~131,535~~ 131,535
Parking Garage	~~1,660,290~~ 1,723,390
Building Total	~~2,917,634~~ 2,947,279
Other Electricity Demand	
All Land Uses – Water/Wastewater Total	226,277
Total	~~3,143,911~~ 3,173,556

Source: Appendix C-3.
kWh = kilowatt-hour.

As shown in Table 4.4-1, buildout of the proposed Project is estimated to have a total electrical demand of ~~3,143,911~~3,173,556 kWh per year (or ~~203~~ million kWh per year) for proposed Project usage. As previously discussed, the County's annual electricity use was approximately 68 billion kWh in 2018. Therefore, the proposed Project's electrical consumption would be a small percentage (0.005%) of the County's annual use. SCE forecasts that its total energy consumption in 2024 (the Project buildout year) will be approximately 120,000 gigawatt hours of electricity (CEC 2018b). Based on the Project's estimated electrical consumption of 3,143,911 kWh/year, the Project would account for approximately 0.0026% of SCE's total projected consumption during 2024 for the Project's buildout year.[3]

Section 4.4.4, Impact Analysis, Threshold 4.4a, Natural Gas, Operations, Page 4.4-15

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Natural gas consumption during proposed Project operation would be required for various purposes, including building heating and cooling. As discussed in Section 4.2 under Approach and Methodology (Operational Emissions), default natural gas generation rates in CalEEMod for the proposed Project were ~~revised~~ used, ~~to account for~~which reflect compliance with the 2019 Title 24 standards. ~~It was assumed that multi-family residential savings are 5% of natural gas from the 2016 standards. For non-residential buildings, the savings are 1% of natural gas.~~ Table 4.4-2 presents the natural gas demand for the proposed Project.

Table 4.4-2. Operational Natural Gas Demand

Land Use	kBTU/Year
Residential	~~2,927,690~~ 2,932,350
Retail	~~14,527~~ 15,029
Fast Casual Restaurant	~~956,561~~ 956,561
Total	~~3,898,778~~ 3,903,940

Notes: kBTU = thousand British thermal units.
Source: Appendix C-3.

As shown in Table 4.4-2, buildout of the proposed Project would consume approximately ~~3,898,778~~3,903,940 kBTU per year. As previously discussed, SoCalGas customers annual natural gas consumption is estimated to be 7,876 million therms per year. Therefore, the proposed Project's estimated natural gas consumption of ~~3,898,778~~3,903,940 kBTU (or ~~38,988~~39,039 therms) per year would be a small percentage (0.0005%) of SoCalGas' annual supply to customers. In addition, the proposed Project is subject to statewide mandatory energy requirements as outlined in Title 24, Part 6, of the California Code of Regulations. Title 24, Part 11, contains energy measures that are applicable to the proposed Project. The proposed Project would be required to meet Title 24 requirements applicable at that time, as required by state regulations through the plan review process. Therefore, due to the inherent increase in efficiency

of building code regulations, the proposed Project would not result in a wasteful, inefficient, or unnecessary use of natural gas. Impacts related to operational natural gas use would be less than significant.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Construction, Page 4.4-16

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-4. Construction Equipment Diesel Demand

Phase	Pieces of Equipment	Equipment CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	6	35.70	10.21	3,496.65
Phase 1 - Site Preparation	7	36.78	10.21	3,602.27
Phase 1 - Grading	6	57.32	10.21	~~5,614.03~~ 5,614.04
Phase 1 - Building Construction	9	225.93	10.21	~~22,128.48~~ 22,128.51
Phase 1 - Paving	6	44.06	10.21	4,315.44
Phase 1 - Application of Architectural Coatings	1	5.62	10.21	550.17
Phases 2 and 3 - Demolition	6	71.38	10.21	6,991.51
Phases 2 and 3 - Site Preparation	7	36.80	10.21	3,603.89
Phases 2 and 3- Grading	6	54.73	10.21	5,360.16
Phases 2 and 3 - Building Construction	9	303.69	10.21	29,744.23
Phases 2 and 3 - Paving	6	43.06	10.21	4,217.14
Phases 2 and 3 - Application of Architectural Coatings	1	5.49	10.21	537.66
			Total	~~90,161.59~~ 90,161.66

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Construction, Pages 4.4-17 and 4.4-18

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-5. Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	1,760	~~8.03~~ 7.69	8.78	~~914.29~~ 875.95
Phase 1 - Site Preparation	1,100	~~5.26~~ 5.04	8.78	~~598.64~~ 573.53
Phase 1 - Grading	3,440	~~8.11~~ 15.87	8.78	~~1,882.89~~ 1,808.06
Phase 1 - Building Construction	23,400	~~107.80~~ 103.79	8.78	~~12,278.29~~ 11,821.21

Table 4.4-5. Construction Worker Gasoline Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Paving	1,800	~~8.11~~ 7.81	8.78	~~923.50~~ 889.11
Phase 1 - Application of Architectural Coatings	3,600	~~16.22~~ 15.61	8.78	~~1,846.99~~ 1,778.23
Phases 2 and 3 - Demolition	4,300	~~18.63~~ 18.03	8.78	~~2,121.61~~ 2,053.56
Phases 2 and 3 - Site Preparation	2,640	~~11.71~~ 11.33	8.78	~~1,333.59~~ 1,290.82
Phases 2 and 3- Grading	6,720	~~29.80~~ 28.85	8.78	~~3,394.58~~ 3,285.71
Phases 2 and 3 - Building Construction	78,600	~~343.79~~ 333.29	8.78	~~39,155.80~~ 37,959.81
Phases 2 and 3 - Paving	3,440	~~17.75~~ 14.34	8.78	~~1,680.51~~ 1,632.85
Phases 2 and 3 - Application of Architectural Coatings	10,320	~~44.26~~ 43.01	8.78	~~5,041.54~~ 4,898.53
			Total	~~71,172.23~~ 68,867.37

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-6. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	440	~~5.13~~ 4.03	10.21	~~502.16~~ 394.32
Phase 1 - Site Preparation	220	~~2.69~~ 2.11	10.21	~~263.04~~ 206.55
Phase 1 - Grading	430	~~5.35~~ 4.16	10.21	~~523.87~~ 407.86
Phase 1 - Building Construction	5,850	~~70.78~~ 54.59	10.21	~~6,932.82~~ 5,346.35
Phase 1 - Paving	450	~~5.32~~ 4.11	10.21	~~521.44~~ 402.12
Phase 1 - Application of Architectural Coatings	900	~~10.65~~ 8.21	10.21	~~1,042.89~~ 804.24
Phases 2 and 3 - Demolition	1,720	~~19.72~~ 14.95	10.21	~~1,930.95~~ 1,464.21
Phases 2 and 3 - Site Preparation	440	~~5.16~~ 3.92	10.21	~~505.73~~ 383.49
Phases 2 and 3- Grading	840	~~9.86~~ 7.47	10.21	~~965.48~~ 732.11
Phases 2 and 3 - Building Construction	15,720	~~184.20~~ 139.04	10.21	~~18,041.39~~ 13,618.18
Phases 2 and 3 - Paving	860	~~10.06~~ 7.54	10.21	~~984.98~~ 738.77
Phases 2 and 3 - Application of Architectural Coatings	1,720	~~20.11~~ 15.09	10.21	~~1,969.94~~ 1,477.53

Table 4.4-6. Construction Vendor Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
			Total	~~34,184.68~~ 25,975.71

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

Table 4.4-7. Construction Haul Diesel Demand

Phase	Trips	Vehicle CO_2 (MT)	kg CO_2/Gallon	Gallons
Phase 1 - Demolition	200	~~7.47~~ 6.19	10.21	~~731.34~~ 606.06
Phase 1 - Site Preparation	0	0.00	10.21	0.00
Phase 1 - Grading	0	0.00	10.21	0.00
Phase 1 - Building Construction	0	0.00	10.21	0.00
Phase 1 - Paving	0	0.00	10.21	0.00
Phase 1 - Application of Architectural Coatings	0	0.00	10.21	0.00
Phases 2 and 3 - Demolition	200	~~7.09~~ 5.70	10.21	~~694.04~~ 558.67
Phases 2 and 3 - Site Preparation	0	0.00	10.21	0.00
Phases 2 and 3- Grading	1,720	~~60.94~~ 49.05	10.21	~~5,968.74~~ 4,804.53
Phases 2 and 3 - Building Construction	0	0.00	10.21	0.00
Phases 2 and 3 - Paving	0	0.00	10.21	0.00
Phases 2 and 3 - Application of Architectural Coatings	0	0.00	10.21	0.00
			Total	~~7,394.11~~ 5,969.27

Source: Appendix C-3.
CO_2 = carbon dioxide; MT = metric ton; kg = kilogram.

As shown in Tables 4.4-5 through 4.4-7, the proposed Project is estimated to consume approximately ~~202,913~~190,974 gallons of petroleum during the construction phase. For disclosure, by comparison, approximately 81 billion gallons of petroleum would be consumed in California over the course of the proposed Project's construction phase, based on the California daily petroleum consumption estimate of approximately 78.6 million gallons per day (EIA 2019c). Thus, the total expected petroleum use from the proposed Project's construction represents approximately ~~0.0003~~0.0002% of California's consumption of petroleum over the construction duration. In accordance CARB's Airborne Toxics Control Measure, the proposed Project would be required to restrict heavy-duty diesel vehicle idling time to 5 minutes, which would reduce petroleum usage. Overall, because petroleum use during construction would be temporary, and would not be wasteful or inefficient, impacts would be less than significant.

Section 4.4.4, Impact Analysis, Threshold 4.4a, Petroleum, Operations, Page 4.4-19

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.4-8. Petroleum Consumption – Operation

Fuel	Vehicle MT CO_2	kg CO_2/Gallon[a]	Gallons
Gasoline	~~1,633.12~~ 1,298.75	8.78	~~186,004.17~~ 147,921.06
Diesel	~~133.81~~ 106.42	10.21	~~13,106.20~~ 10,422.79
		Total	~~199,110.37~~ 158,343.85

Source: Appendix C-1.
MT = metric ton; CO_2 = carbon dioxide; kg = kilogram.

As depicted in Table 4.4-8, mobile sources from buildout of the proposed Project would result in approximately ~~199,110~~158,344 gallons of petroleum fuel usage per year. For disclosure, by comparison, California as a whole consumes approximately 28.7 billion gallons of petroleum per year (EIA 2019c). Los Angeles County had 3,659 million gallons of gasoline and 301 million gallons of diesel fuel sold in 2017 (Los Angeles County 2020). Therefore, the proposed Project would consume (at buildout), approximately ~~0.005~~0.004% of the gasoline and ~~0.062~~0.003% of the diesel sold within the County (in 2017).

Section 4.4.8, References, Page 4.4-21

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA (California Air Pollution Control Officers Association). ~~2017~~2021. California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0. Prepared by Trinity Consultants and the California Air Districts. ~~November 2017~~May 2021. http://www.caleemod.com.

Section 4.6, Greenhouse Gas Emissions

Introduction, Page 4.6-1

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

This section describes the existing greenhouse gas (GHG) emissions conditions of the Pacific Coast Commons Specific Plan Project (Specific Plan or Project) site and vicinity, and identifies associated regulatory requirements, thresholds of significance, impact analysis, cumulative impacts, mitigation measures (if any), level of significance after mitigation, and references. Information contained in this section is based on the latest version of California Emissions Estimator Model (CalEEMod), Version ~~2016.3.2~~2020.4.0, to estimate the proposed Project's GHG emissions from both construction and operations. For the relevant data, refer to the following appendix:

Section 4.6.1, Existing Conditions, Global Warming Potential, Page 4.6-4

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

The current version of CalEEMod (Version ~~2016.3.2~~2020.4.0) (CAPCOA ~~2017~~2021) assumes that the GWP for CH4 is 25 (so emissions of 1 MT of CH4 are equivalent to emissions of 25 MT of CO2), and the GWP for N2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007). The GWP values identified in CalEEMod were applied to the proposed Project.

Section 4.6.3, Thresholds of Significance, Approach and Methodology, Page 4.6-26

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Construction Emissions

CalEEMod Version ~~2016.3.2~~2020.4.0 (CAPCOA ~~2017~~2021) was used to estimate potential Project-generated GHG emissions during construction. Construction of the proposed Project would result in GHG emissions primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details for construction criteria air pollutants discussed in Section 4.2.3, Thresholds of Significance (Approach and Methodology, Construction Emissions, in Section 4.2, Air Quality, are also applicable for the estimation of construction-related GHG emissions. As such, see Section 4.2.3 in Section 4.2, Air Quality, for a discussion of construction emissions calculation methodology and assumptions used in the GHG emissions analysis.

Operational Emissions

Emissions from the operational phase of the proposed Project were estimated using CalEEMod Version ~~2016.3.2~~2020.4.0. Operational year 2025 was assumed, consistent with the construction schedule.

Section 4.6.4, Impact Analysis, Threshold 4.7a, Construction Emissions, Page 4.6-28

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.6-3. Estimated Annual Construction Greenhouse Gas Emissions

	CO_2	CH_4	N_2O	CO_2e
Year	*Metric Tons per Year*			
2021	~~142.60~~ 138.12	0.03	0.00	~~143.44~~ 139.77
2022	~~532.13~~ 506.49	~~0.09~~ 0.08	0.00	~~534.30~~ 512.64
2023	~~811.25~~ 755.30	~~0.11~~ 0.10	0.00	~~814.00~~ 767.10
2024	~~483.97~~ 451.45	0.05	0.00	~~485.34~~ 457.66
			Total	~~1,977.08~~ 1,877.17

Notes: CO_2 = carbon dioxide; CH_4 = methane; GHG = greenhouse gas; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent. See Appendix C-1 for complete results.

As shown in Table 4.6-3, the estimated total GHG emissions during construction of would be approximately ~~1,977~~1,877 MT CO2e over the construction period.

Section 4.6.4, Impact Analysis, Threshold 4.7a, Operational Emissions, Pages 4.6-28 and 4.6-29

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

Table 4.6-4. Estimated Operational Greenhouse Gas Emissions

Emission Source	CO_2	CH_4	N_2O	CO_2e
	Metric Tons per Year			
Area	4.45	<0.01[a]	0.00	4.56
Energy (natural gas and electricity)	~~951.51~~ 959.34	0.03	0.01	~~955.38~~ 963.24
Mobile	~~1,764.82~~ 1,381.33	~~0.08~~ 0.11	0.00	~~1,766.93~~ 1,405.16
Solid waste	17.53	1.04	0.00	43.42
Water supply and wastewater	80.60	0.02	0.01	84.77
Construction (amortized over 30 years)	—	—	—	~~65.90~~ 62.57
			Total Emissions	~~2,920.93~~ 2,563.72
			SCAQMD GHG Threshold	3,000
			Exceeds thresholds?	No

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrogen dioxide; CO_2e = carbon dioxide equivalent.
See Appendix C-1 for complete results.
Proposed Project GHG emissions are based on the "mitigated" CalEEMod outputs, which includes reduction in indoor and outdoor water consumption, consistent with CALGreen and compliance with the AB 939 waste reduction goal.
[a] <0.01 = value less than reported 0.01 metric tons per year.

Section 4.6.8, References, Page 4.6-49

The following revised text is based on remodeling prepared as a result of Responses to Additional Comments Received.

CAPCOA. ~~2017~~2021. California Emissions Estimator Model (CalEEMod) User's Guide Version ~~2016.3.2~~2020.4.0 Prepared by BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts. ~~October 2017~~May 2021. http://www.caleemod.com.

Section 4.9, Land Use and Planning

The date referenced for the Circulation Element has erroneously cited as last updated in 1992; however, the Draft EIR's analysis is based on the 2004 Circulation Element, which is consistent with the most recent update to the element since the 1992 General Plan was first adopted. As such, a corrected citation has been made under Section 4.9.8, References, of the Draft EIR.

Section 4.9.2, Relevant Plans, Policies, and Ordinances, Subsection City of El Segundo General Plan, Circulation Element, Pages 4.9-5 and 4.9-6

The purpose of the Circulation Element is to assist the City in providing a safe, convenient, and efficient circulation system. State law requires that a circulation element be incorporated into the General Plan. The Circulation Element identifies a system capable of responding to growth occurring consistent with the policies and Land Use Plan presented in the Land Use Element. The Circulation Element identifies physical improvements that will be needed to attain the Circulation goals and objectives, as well as alternative techniques to improve the City's circulation system. The circulation system is one of the most important of all urban systems in determining the form and quality of the El Segundo environment. The circulation modes used, location of routes, operational policies and the operating levels of service influence the nature of urban development, the physical organization of the City, and can enhance or limit the social and economic activity within the City (City of El Segundo ~~1992~~2004).

Section 4.9.8, References, Page 4.9-35

City of El Segundo. 2004. *City of El Segundo Circulation Element of the General Plan*. Adopted September 2004. https://www.elsegundo.org/home/showpublisheddocument/1958/637237747168070000.

Section 4.10, Noise

Section 4.10.4, Impact Analysis, Threshold 4.10a, Subsection Construction Noise (Short-Term Impacts), Page 4.10-16

The following text edits were made to correct typographical errors.

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
ST1 (West of Indiana Street)	59.0	56.1	59.5	55.5	-4.0
ST2 (Northwestern Project Boundary)	55.0	55.9	55.2	55.7	0.9
ST3 (Eastern Project Boundary Approximately 50 Feet from PCH)	69.5	68.2	70.3	68.7	~~1.6~~ -1.6
ST4 (Northeast Corner of E Mariposa Avenue and Illinois Court)	63.0	62.7	~~63.3~~ 63.4	62.9	~~0.4~~ -0.5
ST5 (Norther Project Boundary approximately 30 feet from E Palm Avenue)	59.2	57.9	59.8	58.5	-1.3
ST6	69.5	69.6	70.2	70.2	0.1

Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results

Figure 4.10-1 Modeled Receiver Tag (Location Description)	Existing (2019) Noise Level (dBA CNEL)	Existing (2019) Plus Project Noise Level (dBA CNEL)	Future (2025) Noise Level (dBA CNEL)	Future (2025) Plus Project Noise Level (dBA CNEL)	Maximum Project-Related Noise Level Increase (dB)
(Eastern Project Boundary approximately 50 feet from PCH)					

dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

Section 4.11, Population and Housing

Section 4.11.2, Relevant Plans, Policies, and Ordinances, Subsection Regional and Local, Regional Housing Needs Allocation (RHNA), Page 4.11-9

Subsequent to the release of the Draft EIR for public review, the City's fair share allocation for the 2021-2029 RHNA planning period was revised from 491 to 492.

Table 4.11-7. SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology

Total	Very-Low Income	Low Income	Moderate Income	Above Moderate Income
SCAG Region				
1,341,827	351,796	206,807	223,957	559,267
Los Angeles County				
~~813,082~~ 812,060	~~217,565~~ 217,273	~~123,171~~ 123,022	~~131,532~~ 131,381	~~340,814~~ 340,384
City of El Segundo				
~~491~~ 492	189	88	~~83~~ 84	131

Source: SCAG 2020d

Section 4.11.4, Impact Analysis, Threshold 4.3a, Subsection Long-Term Operational Impacts, Employment Projections, Page 4.11-16

The table has been revised to revise a typographical error.

Table 4.11-8. Employment Estimate

Land Use/Structure	Size	Employee Generation Factor	Number of Employees
Retail-Community	7,552 square feet	1 employee per 600 square feet	12.6
Restaurant-Fast Food	3,700 square feet	1 employee per 100 square feet	37

Table 4.11-8. Employment Estimate

Land Use/Structure	Size	Employee Generation Factor	Number of Employees
Residential	~~236~~263 units	1 Site Manager, 1 Leasing Agent, 1 Collections, 1 Lead Maintenance, 2 Maintenance Technicians	6
		Total	**55.6**

Source: South Florida Regional Planning Council 2006

[a] Assumes "Neighborhood Shopping Center" commercial category

[b] Assumes carry-out with seating generally a fast food operation where the food is partially ready before serving.

Section 4.11.4, Impact Analysis, Threshold 4.3a, Subsection Long-Term Operational Impacts, Housing Projection Analysis, Page 4.11-17

Subsequent to the release of the Draft EIR for public review, the City's fair share allocation for the 2021-2029 RHNA planning period was revised from 491 to 492.

> Table 4.11-7 provides the 6th Cycle RHNA allocation for 2021 to 2029 as set forth in the Connect SoCal 2020–2045 RTP/SCS. Because the proposed Project will be occupied within the timeframe of the 6th Cycle, it is most relevant to the analysis. The City's fair share allocation for the planning period is ~~491~~492 units. This indicates that between the years 2021 to 2029, the City needs to accommodate at least ~~491~~492 housing units, consisting of a variety of housing types to accommodate extremely low, very low, low, moderate, and above moderate-income households to keep pace with housing demand. The proposed Project would create new housing and would include affordable housing in accordance with the negotiated Development Agreement. The specific allocation between the types of low-income housing has yet to be determined; however, the proposed low-income units would satisfy a portion of the City's mandated 6th Cycle RHNA allocation.

Section 4.11.8, References, Page 4.11-19

The following text edit was made in response to comments based on the revisions made in Section 4.11.2 detailed, above.

> SCAG. 2020d. ***SCAG 6th Cycle Final*** *RHNA* ~~***Estimated***~~ *Allocation*~~***s Plan***~~***.*** ~~Updated September 3, 2020~~Approved by HCD on March 22, 2021 and modified on July 1, 2021. ~~https://scag.ca.gov/sites/main/files/file-attachments/rhna-draft-allocations-090320-updated.pdf?1602188695~~ https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1625161899.

Section 4.13, Transportation

Section 4.13.4, Impact Analysis, Threshold 4.13a, Subsection Level of Service Analysis for General Plan Consistency, Page 4.13-19

The following text edit was made with the addition of three cumulative projects as shown in the Table 2-3, List of Cumulative Projects, above.

Future Plus Project Traffic Conditions

According to Tables 8A and 8B of the TIA (Appendix J-1), the same five study intersections projected to operate at LOS E or worse during the AM or PM peak periods under Future Base conditions are also projected to operate at LOS E or worse during the AM or PM peak periods with the addition of Project traffic. These intersections are as follows:

1. PCH and Imperial Highway (LOS E during PM)
5. PCH and Grand Avenue (LOS E during AM and LOS F during PM)
6. PCH and El Segundo Boulevard (**LOS E during AM and** LOS F during PM)
13. PCH and Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
14. PCH and Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

The Future plus Project scenario of the impact analysis at Mariposa Avenue and PCH has also been analyzed without the Project improvement to show its potential benefit when compared to the Future Base and Future plus Project with improvement conditions at Mariposa Avenue (as described under Approach and Assumptions). The analysis shows that LOS at Mariposa Avenue and PCH is better with the addition of the Project-related improvement than without. A queuing analysis was conducted for the eastbound approach with and without Project improvement to show the potential improvement in queue length. The results of this analysis are shown in Appendix E of the TIA (Appendix J-1).

Section 4.13.4, Impact Analysis, Threshold 4.13c, Subsection Project Access, Page 4.13-22

The building height recorded for PCC-Fairfield Parking was cited as 50 feet in height. However, the text within the Draft EIR did not clarify which elevation was cited; from Pacific Coast Highway (PCH) or from Indiana Street. The revised text reflects the proposed building height of 63 feet from Indiana Street. This is consistent with Figure 3-5C, Conceptual PCC-Fairfield Parking Section, which depicts a section view of the proposed parking structure. Although, the building height for PCC-Fairfield is 50 feet at PCH, as illustrated in Figure 3-5C as well as Figure 4.1-6, Conceptual Site Plan Building Heights from Elevation of PCH, clarification was added to the text to provide the maximum height at PCC-Fairfield. Furthermore, the building height of the proposed parking garage was provided to quantify the height in feet of the five-level structure. As such, the text revision does not substantially change the intent and purpose of the discussion.

Project Access

Project access would not substantially increase hazards due to design features or incompatible uses. The driveway configurations for the individual sites are as follows and illustrated in Figure 4.13-5:

- PCC-South would provide eight levels of parking garage (i.e. approximately two levels of subterranean and six levels above ground, depending on elevation grade). The parking garage would provide 165 parking spaces exclusively for residential tenant use, and 171 spaces would be shared between residential guest parking, commercial use, and for overflow if needed from other sites, resulting in a total of 336 parking spaces within the multi-level parking structure. Ingress/egress into the parking structure would be via driveways on PCH and Indiana Street.

- PCC-Fairfield Parking includes a five-level parking garage (~~50~~63 feet in height from Indiana Street) with 215 replacement parking spaces for the Fairfield Inn and Suites Hotel, which would be shared between the hotel and the commercial/retail uses. Ingress to the parking structure would be provided via a driveway on PCH.

SECTION PAGE NO.

3 CHANGES TO THE DRAFT EIR 1
3.1 Introduction 1
3.2 Errata 1

Appendices

A Insert Title
B Insert Title

Figures

Figure 2-5 Cumulative Project Location Map 7

Tables

Table 2-3. List of Cumulative Projects 4
Table 4.10-6. Off-Site Roadway Traffic Noise Modeling Results 23
Table 4.11-7. SCAG's 6th Cycle Estimate of RHNA Allocation based on Approved RHNA Methodology 24
Table 4.11-8. Employment Estimate 24

4 Mitigation Monitoring and Reporting Program

California Public Resources Code Section 21081.6 requires that, upon certification of an EIR, "the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

This chapter contains the mitigation monitoring and reporting program (MMRP) that has been developed for the Pacific Coast Commons Specific Plan Project (Specific Plan or Project). This MMRP has been developed in compliance with Public Resources Code Section 21081.6 and Section 15097 of the CEQA Guidelines. The mitigation measures in the table are coded by alphanumeric identification consistent with the EIR. The following items are identified for each mitigation measure:

- **Mitigation Monitoring.** This section of the MMRP lists the stage of the proposed project during which the mitigation measure would be implemented and the stage during which proper implementation would be monitored and verified. It also lists the agency that is responsible for ensuring that the mitigation measure is implemented and that it is implemented properly.
- **Verification of Compliance.** This section of the MMRP provides a location for the implementing party and/or enforcing agency to make notes and to record their initials and the compliance date for each mitigation measure.

The City of El Segundo (City) must adopt this MMRP, or an equally effective program, if it approves the proposed project with the mitigation measures that were adopted or made conditions of project approval.

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Air Quality						
MM-AQ-1. To reduce the potential for criteria air pollutants, specifically particulate matter (PM), as a result of construction of the Project, the Construction Contractor's contract specifications shall require compliance with the following: Prior to the start of construction activities, the Construction Contractor shall ensure that all 75 horsepower or greater diesel-powered equipment are powered with California Air Resources Board (CARB)-certified Tier 4 Interim engines. An exemption from this requirement may be granted if equipment with Tier 4 Interim engines are not reasonably available and the required corresponding reductions in criteria air pollutant emissions can be achieved from other combinations of construction equipment, such as using equipment with Tier 4 Final engines. Before an exemption may be granted, the City's Construction Contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Los Angeles County were contacted and that those owners/operators confirmed Tier 4 Interim equipment could not be located within Los Angeles County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using CalEEMod and documentation provided to the City to confirm that Project-generated emissions do not exceed applicable localized significance thresholds (LST) for nitrogen dioxide (NO2), carbon monoxide (CO), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM2.5), and the	Prior to commencement of construction activities	Construction Contractor shall ensure that CARB-certified Tier 4 Interim engines are being utilized	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
SCAQMD carcinogenic (cancer) risk threshold. If these requirements cannot be met, construction activities at the Project site shall be postponed until CARB-certified Tier 4 Interim engines are available for use.						
Cultural Resources						
MM-CUL-1. Prior to commencement of construction activities for all phases of Project implementation, the Project applicant shall retain a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, to prepare a Worker Environmental Awareness Program (WEAP). The WEAP shall be submitted to the City of El Segundo for review and approval. All construction personnel and monitors shall be presented the WEAP training prior to the start of construction activities. The WEAP shall be prepared to inform all personnel working on the proposed Project about the archaeological sensitivity of the area, to provide specific details on the kinds of archaeological materials that may be identified during construction, to explain the importance of and legal basis for the protection of significant archaeological resources, and to outline the actions to be taken in the event of a discovery of cultural resources. The WEAP shall define "tribal cultural resources" and include appropriate management requirements relating to inadvertent discovery of a potential tribal cultural resource. Each worker shall also learn the proper procedures to follow in the event that cultural resources or human remains are uncovered during ground-disturbing activities. These procedures include work curtailment or redirection, and the	Prior to commencement of construction activities for all phases of Project implementation; Upon discovery of any archaeologic resources	Project applicant; Project archaeologist for meeting attendance and preparation of a mitigation plan	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
immediate contact of the site supervisor and archaeological monitor.						
MM-CUL-2. If potential archaeological resources (i.e., sites, features, or artifacts) are exposed during construction activities for the proposed Project, the City shall be notified and all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology, can evaluate the significance of the find and determine whether or not additional study is warranted. The archaeologist shall be empowered to temporarily stop or redirect grading activities to allow removal of abundant or large artifacts. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; PRC, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan and data recovery, may be warranted. The archaeologist shall also be required to curate any discovered specimens in a repository with permanent retrievable storage and submit a written report to the City of El Segundo for review and approval prior to occupancy of the first building on the site. Once approved, the final report shall be filed with the South-Central Coastal Information Center (SCCIC).	During construction activities; Upon discovery of any archaeologic resources	City of El Segundo Development Services Department; Project archaeologist	City of El Segundo Development Services Department			
Geology and Soils						
MM-GEO-1. Prior to commencement of any grading activity on-site, the Project applicant/Developer shall retain a qualified paleontologist per the Society of Vertebrate	Prior to grading activities	Project applicant; Project	City of El Segundo Development Services			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Paleontology (SVP) (2010) guidelines. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the Project for review and approval by the City. The PRIMP shall be consistent with the SVP (2010) guidelines and shall outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the Project site below a depth of 5 feet below the existing ground surface or depth of documented artificial fill (based on construction plans and/or geotechnical reports), procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. At a minimum, the PRIMP shall require that a qualified paleontologist attend the preconstruction meeting and a qualified paleontological monitor be on-site during all rough grading and other significant ground-disturbing activities (including augering) in previously undisturbed, Pleistocene Sand Dune deposits. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the PRIMP shall require that a paleontological monitor temporarily halt and/or divert grading activity to allow recovery of paleontological resources.		paleontologist	Department			
Hazards and Hazardous Materials						
MM-HAZ-1. The Project applicant/Developer shall ensure that the demolition contractor's contract specifications incorporate abatement procedures for the removal of materials containing asbestos, lead, polychlorinated biphenyls, hazardous material, hazardous wastes, and	During demolition activities	Project applicant; Demolition contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
universal waste items. Confirmation of adequate removal of such materials shall be provided to the City prior to the issuance of a building permit for PCC-Fairfield Parking. All abatement work shall be done in accordance with federal, state, and local regulations, including those of the U.S. Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, U.S. Department of Housing and Urban Development, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.						
MM-HAZ-2. Prior to commencement of any earthwork or construction activities at PCC-North, a Hazardous Materials Contingency Plan (HMCP) shall be developed that addresses potential impacts in soil and soil vapor associated with the 76 Station adjacent to PCC-North. The HMCP shall include training procedures for identification of contamination, and shall describe procedures for assessment, characterization, management, and disposal of hazardous constituents, materials, and wastes, and notification in accordance with all applicable state and local regulations. Contaminated soils shall be managed and disposed of in accordance with local and state regulations. The HMCP shall include health and safety measures, which may include but are not limited to periodic work breathing zone monitoring and monitoring for volatile organic compounds using a handheld organic vapor analyzer in the event impacted soils are encountered during excavation activities. The applicant or its designee shall implement the HMCP during construction activities for the proposed Project.	Prior to commencement of any earthwork or construction activities at PCC-North	Project applicant or its designee	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
Noise						
MM-NOI-1. Prior to issuance of a demolition or grading permit, whichever occurs first, the Project Applicant/Developer or its approved construction contractor shall develop and submit to the City of El Segundo a Construction Noise Mitigation Plan (CNMP) for review and approval. The CNMP shall include, at a minimum, the following noise reduction means and related measures: a) To protect the existing occupied residences on the west side of Indiana Street (and west of the PCC North (Phase 2) portion of the Project, between E. Mariposa Avenue and E. Palm Avenue) from excessive Project construction-related noise attributed to demolition, site preparation, grading, building construction, and paving activities during PCC-Fairfield Parking (Phase 1) and PCC-South (Phase 3), and those same five activities plus architectural coating activities during Phase 2, temporary noise barriers of sufficient height and extent along the Project's western site boundary shall be installed and shall be confirmed to achieve (depending on construction phase activity and involved equipment) at least 5 dBA and as much as 20 dBA of barrier noise insertion loss. The temporary barrier elements should resemble an outdoor-use vinyl-covered acoustical blanket comprising one or more materials that demonstrate a sound	Prior to issuance of a demolition or grading permit; During site preparation, grading, building construction, architectural coating, and/or paving activities associated with Phases 1, 2, and 3; Two (2) weeks prior to any construction phase commencement	Project applicant or approved Construction Contractor; Project acoustical consultant or noise control engineer; Project concrete saw operator and/or Construction Contractor	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
transmission class (STC) of 30 or better. The Project Applicant/Developer shall retain the services of a qualified acoustical consultant or noise control engineer to advise on or review the design, installation, and expected performance of such temporary barriers when used during Project construction. Anticipated locations, horizontal extents, heights, and durations of installation of the temporary sound barriers over the course of Project phased buildout shall be part of the CNMP submitted to the City for review. b) Operation of a concrete saw during the demolition phase shall include some form of proximate and portable solid-walled partial enclosure, acoustical-blanket tent, or comparably-performing shroud that can reliably deliver 10 dBA of noise reduction—separate from the temporary barrier insertion loss need described in MM-NOI-1(a) above. Alternately, slotted low-noise saw blades may be used to yield some or all of this noise reduction, so that operation of the concrete saw at a distance of 50 feet does not exceed 80 dBA. If this limit cannot be wholly achieved due to saw operation noise control or localized sound abatement (i.e., partial enclosure), then the balance of needed attenuation shall be provided by either the temporary noise barrier per MM-NOI-1(a) or by limiting duration of saw operation within an hour: each halving of duration should yield a 3 dB						

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
reduction to the hourly noise level produced by the saw. c) Residents within 200 feet of the Project shall be informed at least two (2) weeks in advance when construction phase activities will occur. An information telephone hotline and/or website shall be established and managed to receive resident complaints, and the Applicant and its contractors shall respond to received complaints and document their investigations and any complaint resolutions in regular reports to the City Building Safety division.						
Transportation						
MM-TRA-1. Prior to the issuance of demolition or grading permits, the Project Applicant/Developer shall develop and implement a City-approved Construction Traffic Control Plan. The Plan shall be prepared in accordance with applicable City and Manual on Uniform Traffic Control Devices guidelines and shall address the potential for construction-related vehicular traffic, as well as pedestrian and bicycle circulation disruption in the public right-of-way. The Plan shall describe safe detours and shall include protocols for implementing the following, if determined necessary and feasible: temporary traffic controls (e.g., a flag person) during construction to maintain smooth traffic flow; dedicated turn lanes for movement of construction trucks and equipment on and off site; scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours; consolidation of truck deliveries; and/or	Prior to the issuance of demolition or grading permits	Project Applicant	City of El Segundo Development Services Department			

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Mitigation Monitoring			Verification of Compliance		
	Implementation Timing	*Party Responsible for Implementation*	*Agency Responsible for Monitoring Implementation*	*Initial*	*Date*	*Comments*
rerouting of construction trucks away from congested streets or sensitive receptors						
Tribal Cultural Resources						
MM-TCR-1. Should a potential tribal cultural resource (TCR) (as defined by PRC Section 21074) be inadvertently encountered during construction activities, consistent with the process required by MM-CUL-2, all construction work occurring within 100 feet of the find shall immediately stop and the City shall be notified of the discovery. The City shall notify Native American tribes that have been identified by the Native American Heritage Commission to be traditionally and culturally affiliated with the geographic area of the Project. Any affected tribe shall be provided a reasonable period of time to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the potential resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of the City that the approach is reasonable and feasible.	In the event that a tribal cultural resource is encountered during any and all construction activities associated with any and all Project Phases	Construction Contractor; Native American Heritage Commission (NAHC) identified Native American tribes; Project archeologist	City of El Segundo Development Services Department; NAHC			

Table of Contents

SECTION PAGE NO.

4 MITIGATION MONITORING AND REPORTING PROGRAM 1

Tables

Table 4-1. Mitigation Monitoring and Reporting Program 2

Appendix A

Revised Future Analysis

FEHR PEERS

Memorandum

Date: August 11, 2021

To: Kristin Starbird, Dudek

From: Tom Gaul and Vivian Lee

Subject: Revised Future Analysis for Pacific Coast Commons

LA18-3078

This memorandum summarizes the results of the revised intersection level of service analysis conducted for the Pacific Coast Commons (Project) in response to comments on the Draft Environmental Impact Report (DEIR). This analysis is supplemental to the previous report, *Pacific Coast Commons Transportation Impact Analysis*, dated November 2020. This memorandum is to be included as an appendix to the Project's Final Environmental Impact Report (FEIR).

Based on public and agency review and comment on the DEIR, three additional related projects were added to the original list. As a result, the following revised supplemental analysis was conducted:

- Future Intersection Level of Service Analysis
- Future plus Project Intersection Level of Service Analysis
- Future Peak Hour Signal Warrant Analysis
- Future plus Project Peak Hour Signal Warrant Analysis
- Future plus Project Driveway Level of Service Analysis
- Future plus Project Driveway Queueing Analysis

Revised Future Year 2027 Traffic Conditions

To reevaluate the potential effects of the proposed Project on future (Year 2027, Project Opening Year) conditions, it was necessary to revise estimates of future traffic conditions in the area both without and with project traffic. First, estimates of traffic growth were revised for the study area to forecast future conditions without the Project. These revised forecasts included traffic increases as a result of both regional ambient traffic growth and traffic generated by specific developments in the vicinity of the Project (related projects), including the three additional related projects.

These projected traffic volumes, identified herein as the revised Future Base conditions, represent the future conditions without the proposed Project. The traffic generated by the proposed Project was then assigned to the surrounding street system and added to the revised Future Base conditions to form the revised Future plus Project traffic conditions.

Revised Related Projects Trip Generation

Future Base traffic forecasts include the effects of known specific projects, called related projects, expected to be implemented in the vicinity of the proposed Project prior to the buildout date of the proposed Project. Three additional related projects were identified by the City of El Segundo to be added to the original list of 30 that were previously identified in the study area. These three additional projects are listed in **Table 1**. Revised related projects traffic volumes are shown in **Figure 1**.

Revised Future Year 2027 Base Traffic Volumes

Revised Future year 2027 base weekday AM and PM peak hour traffic volumes and lane geometries for the analyzed intersections are shown in **Figure 2**. The Future Base traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and the related projects' traffic from the original list as well as the three additional projects.

Revised Future plus Project Traffic Projections

The proposed Project traffic volumes were added to the revised Future Base traffic projections, resulting in the revised Future plus Project AM and PM peak hour traffic volumes. As shown in **Figure 3**, the revised Future plus Project scenario presents future traffic conditions with the completion of the proposed Project.

Revised Future Intersection Level of Service Analysis

Revised Future Base Traffic Conditions

The revised Future Base peak hour traffic volumes were analyzed to determine the projected V/C ratio and delay and LOS for each of the analyzed intersections. **Tables 2A and 2B** summarize the revised future LOS for the signalized and unsignalized intersections, respectively. Five of the 16 study intersections analyzed are projected to operate at LOS E or worse during the AM or the PM peak period under Future Base conditions. These intersections include:

1. Pacific Coast Highway & Imperial Highway (LOS F during PM)
5. Pacific Coast Highway & Grand Avenue (LOS E during AM and LOS F during PM)
6. Pacific Coast Highway & El Segundo Boulevard (LOS E during AM and LOS F during PM)

A. Pacific Coast Highway & Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
B. Pacific Coast Highway & Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

Pacific Coast Highway & El Segundo Boulevard (intersection 6) was originally projected to operate at LOS D during the AM peak period but is now projected to operate at LOS E. However, these are the same five intersections that were projected to operate at LOS E or worse during the peak periods under Future Base conditions as reported in the DEIR. The previous results are shown in Tables 7A and 7B of the transportation impact analysis report.

Revised Future plus Project Traffic Conditions

The revised Future (year 2027) plus Project peak hour traffic volumes, shown in **Figure 3**, were analyzed to determine the projected future operating conditions with the addition of the proposed Project traffic. The results of the revised Future plus Project analysis are presented in **Tables 3A and 3B** with analysis sheets provided in **Attachment A**. The same five study intersections projected to operate at LOS E or worse during the AM or PM peak periods under Future Base conditions are also projected to operate at LOS E or worse during the AM or PM peak periods with the addition of Project traffic. These intersections are:

1. Pacific Coast Highway & Imperial Highway (LOS F during PM)
5. Pacific Coast Highway & Grand Avenue (LOS E during AM and LOS F during PM)
6. Pacific Coast Highway & El Segundo Boulevard (LOS E during AM and LOS F during PM)

A. Pacific Coast Highway & Palm Avenue (LOS F during both AM and PM for the stop-controlled movements only)
B. Pacific Coast Highway & Holly Avenue (LOS F during both AM and PM for the stop-controlled movements only)

Pacific Coast Highway & El Segundo Boulevard (intersection 6) was originally projected to operate at LOS D during the AM peak period but is now projected to operate at LOS E. However, these are the same five intersections that were projected to operate at LOS E or worse during the peak periods under Future plus Project conditions as reported in the DEIR. The previous results are shown in Tables 8A and 8B of the transportation impact analysis report.

Revised Signal Warrant Analysis

A revised signal warrant analysis was conducted at two of the four unsignalized intersections analyzed for the Pacific Coast Commons project: PCH & Palm Avenue (Intersection A) and PCH & Holly Avenue (Intersection B).

Both of these intersections have a projected delay increase of over four seconds for the stop-controlled movements with the inclusion of project related trips. Due to the intersections being two-way-stop-controlled, the addition of even one vehicle results in a large increase in delay at the stop-sign controlled approach. Therefore, a signal warrant analysis was conducted to see if these two intersections trigger the potential need for a traffic signal. Using the Manual on Uniform Traffic Control Devices (MUTCD) methodology, these two intersections were tested to see if their volumes meet signal warrants. The peak hour signal warrant was used for this analysis, and it is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Neither the PCH & Palm Avenue intersection nor the PCH & Holly Avenue intersection trigger a signal warrant for the revised Future plus Project scenario. These results are the same as what was reported in the DEIR. **Table 4** summarizes this analysis. The previous results are shown in Table 9 of the transportation impact analysis report.

Analysis sheets for signal warrants can be found in **Attachment B**.

Revised Level of Service Analysis for Project Driveways

A revised level of service analysis was conducted to evaluate the ability of the Project access plan to accommodate the anticipated traffic levels at the driveway access points. This analysis was only conducted for the Pacific Coast Commons South driveway on PCH, as Indiana Street is a local road and driveway turns are not anticipated to materially affect operations. The Fairfield Parking site driveway on PCH provides inbound access only and is also not anticipated to affect operations.

The Pacific Coast Commons South driveway on PCH will be unsignalized and stop-controlled and was analyzed using the two-way stop-controlled HCM 6th Edition methodology. The revised driveway analysis LOS worksheets are included in **Attachment A**. **Table 5** shows the results of the revised Future plus Project LOS analysis at the unsignalized driveway. The previous results are shown in Table 10 of the transportation impact analysis report.

As shown, the Pacific Coast Commons South driveway approach to PCH is projected to operate at LOS D in the AM peak period and LOS E in the PM peak period under the Future plus Project (2027) scenario. A queuing analysis was also reconducted for the driveway approach to show the estimated length of queues for vehicles exiting the Project site. While the delay is high enough to operate at LOS E under the Future plus Project (2027) scenario, queues are anticipated to be minimal given the volume of outbound project trips at this driveway. Queue results are shown in **Table 6**. These results are the same as what was reported in the DEIR. The previous results are shown in Table 11 of the transportation impact analysis report.

Summary

The various future analyses that were revised to include the three additional related projects identified by the City of El Segundo did not result in a change to any of the conclusions that were reported in the DEIR.

TABLE 1
PACIFIC COAST COMMONS PROJECT
ADDITIONAL RELATED PROJECTS
TRIP GENERATION ESTIMATES

No.	Project Location	Land Use [a]	Size		Trip Generation					
					AM Peak Hour			PM Peak Hour		
					IN	OUT	TOTAL	IN	OUT	TOTAL
1	243 Kansas Street and 330 Kansas Street	Office	243.22	ksf	243	39	282	45	235	280
		Café	0.89	ksf						
2	1475 E El Segundo Blvd	Office	47.84	ksf	48	8	55	9	46	55
3	1320-1330 E Franklin	Office	47.25	ksf	47	8	55	9	46	54

Notes:
ksf = one thousand square feet
Trip Generation Estimates based on *Trip Generation, 10th Edition,* Institute of Transportation Engineers, 2017, unless otherwise noted.
[a] Project details based on related project information provided by Paul Samaras at El Segundo, June 2021.

TABLE 2A
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE INTERSECTION LEVELS OF SERVICE
SIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)	
			V/C	LOS
1	Pacific Coast Hwy &	AM	0.875	D
	Imperial Hwy	PM	1.139	F
2	Pacific Coast Hwy &	AM	0.752	C
	Walnut Ave	PM	0.697	B
3	Pacific Coast Hwy &	AM	0.703	C
	Maple Ave	PM	0.751	C
4	Pacific Coast Hwy &	AM	0.782	C
	Mariposa Ave	PM	0.882	D
5	Pacific Coast Hwy &	AM	0.972	E
	Grand Ave	PM	1.027	F
6	Pacific Coast Hwy &	AM	0.901	E
	El Segundo Blvd	PM	1.170	F
7	Nash St &	AM	0.699	B
	Imperial Hwy	PM	0.574	A
8	Lairport St &	AM	0.424	A
	Mariposa Ave	PM	0.417	A
9	Nash St &	AM	0.463	A
	Mariposa Ave	PM	0.595	A
10	Kansas St &	AM	0.319	A
	Grand Ave	PM	0.368	A
11	Continental Blvd &	AM	0.547	A
	El Segundo Blvd	PM	0.587	A
12	Nash St &	AM	0.638	B
	El Segundo Blvd	PM	0.702	C

TABLE 2B
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE INTERSECTION LEVELS OF SERVICE
UNSIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)	
			Delay	LOS
A	Pacific Coast Hwy &	AM	265.0	F
	Palm Ave	PM	156.1	F
B	Pacific Coast Hwy &	AM	**	F
	Holly Ave	PM	**	F
C	Indiana St &	AM	11.4	B
	Mariposa Ave	PM	13.2	B
D	Indiana St &	AM	7.4	A
	Holly Ave	PM	7.7	A

** Indicates oversaturated conditions. Delay exceeds 300 seconds.

TABLE 3A
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE PLUS PROJECT INTERSECTION LEVEL OF SERVICE
SIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)		FUTURE + PROJECT	
			V/C	LOS	V/C	LOS
1	Pacific Coast Hwy &	AM	0.875	D	0.878	D
	Imperial Hwy	PM	1.139	F	1.158	F
2	Pacific Coast Hwy &	AM	0.752	C	0.756	C
	Walnut Ave	PM	0.697	B	0.706	C
3	Pacific Coast Hwy &	AM	0.703	C	0.709	C
	Maple Ave	PM	0.751	C	0.763	C
4 [a]	Pacific Coast Hwy &	AM	0.782	C	0.749	C
	Mariposa Ave	PM	0.882	D	0.864	D
5	Pacific Coast Hwy &	AM	0.972	E	0.983	E
	Grand Ave	PM	1.027	F	1.034	F
6	Pacific Coast Hwy &	AM	0.901	E	0.908	E
	El Segundo Blvd	PM	1.170	F	1.172	F
7	Nash St &	AM	0.699	B	0.699	B
	Imperial Hwy	PM	0.574	A	0.574	A
8	Lairport St &	AM	0.424	A	0.424	A
	Mariposa Ave	PM	0.417	A	0.417	A
9	Nash St &	AM	0.463	A	0.464	A
	Mariposa Ave	PM	0.595	A	0.595	A
10	Kansas St &	AM	0.319	A	0.319	A
	Grand Ave	PM	0.368	A	0.368	A
11	Continental Blvd &	AM	0.547	A	0.549	A
	El Segundo Blvd	PM	0.587	A	0.590	A
12	Nash St &	AM	0.638	B	0.640	B
	El Segundo Blvd	PM	0.702	C	0.705	C

[a] As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.

TABLE 3B
PACIFIC COAST COMMONS PROJECT
REVISED FUTURE PLUS PROJECT INTERSECTION LEVEL OF SERVICE
UNSIGNALIZED INTERSECTIONS

NO.	INTERSECTION	PEAK HOUR	FUTURE (2027)		FUTURE + PROJECT	
			Delay	LOS	Delay	LOS
A [a]	Pacific Coast Hwy &	AM	265.0	F	**	F
	Palm Ave	PM	156.1	F	237.1	F
B [a]	Pacific Coast Hwy &	AM	**	F	**	F
	Holly Ave	PM	**	F	**	F
C	Indiana St &	AM	11.4	B	11.5	B
	Mariposa Ave	PM	13.2	B	13.5	B
D	Indiana St &	AM	7.4	A	7.5	A
	Holly Ave	PM	7.7	A	7.7	A

[a] A signal warrant analysis was conducted to test the need for traffic signals at intersections with a delay increase of greater than four seconds.
** Indicates oversaturated conditions. Delay exceeds 300 seconds.

TABLE 4
PACIFIC COAST COMMONS PROJECT
REVISED PEAK HOUR SIGNAL WARRANT ANALYSIS

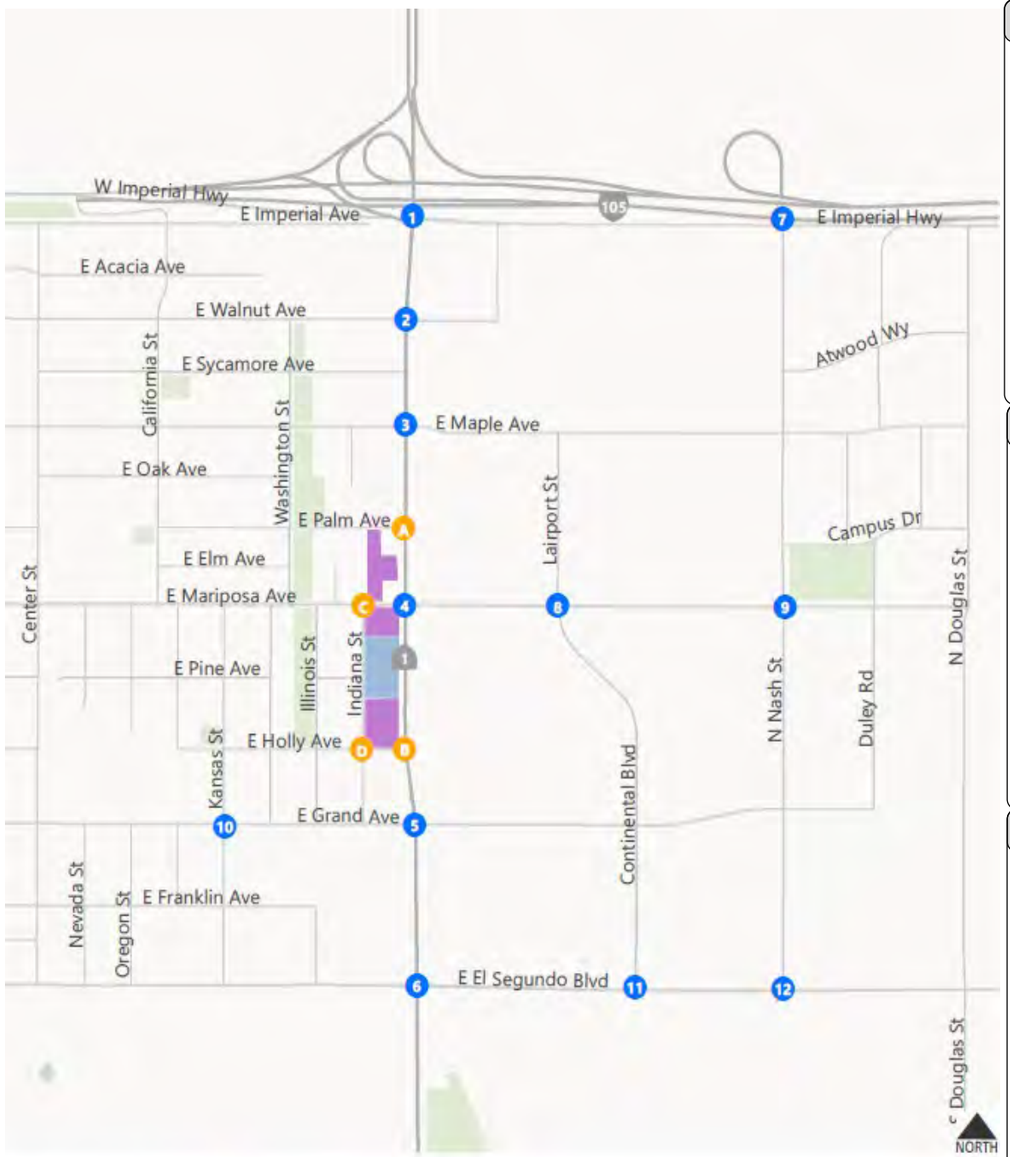
No.	INTERSECTIONS	PEAK HOUR	FUTURE 2027 SIGNAL WARRANT MET	FUTURE 2027 PLUS PROJECT SIGNAL WARRANT MET
A	Pacific Coast Highway & Palm Avenue	AM	NO	NO
		PM	NO	NO
B	Pacific Coast Highway & Holly Avenue	AM	NO	NO
		PM	NO	NO

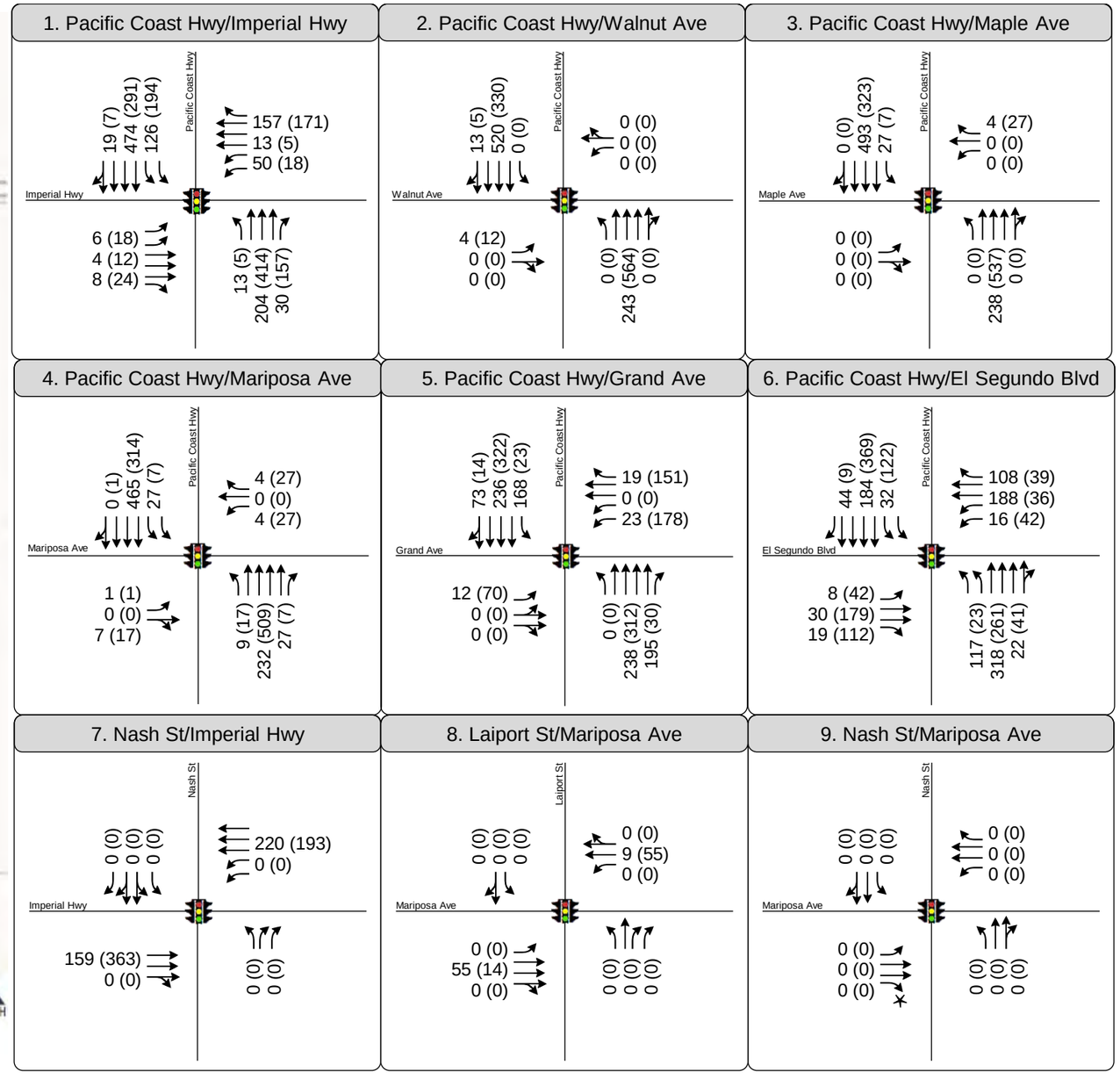
TABLE 5
PACIFIC COAST COMMONS PROJECT
REVISED DRIVEWAY LEVEL OF SERVICE ANALYSIS

DRIVEWAY	PEAK HOUR	FUTURE + PROJECT	
		Delay	LOS
Pacific Coast Hwy &	AM	28.5	D
Pacific Coast Commons South Dwy	PM	35.4	E

TABLE 6
PACIFIC COAST COMMONS PROJECT
REVISED DRIVEWAY QUEUE ANALYSIS

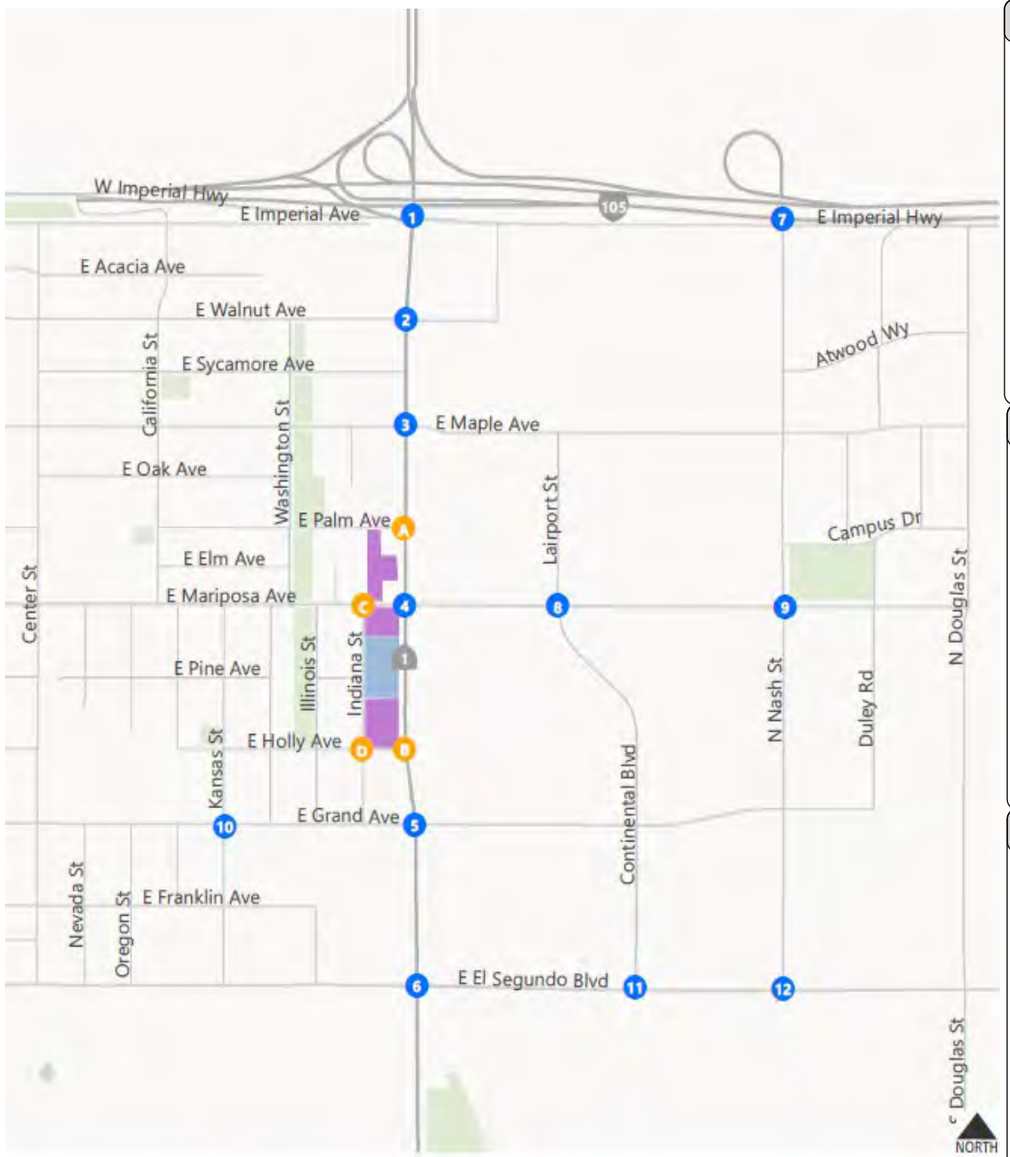
DRIVEWAY	PEAK HOUR	FUTURE + PROJECT
		95th% Queue (ft)
Pacific Coast Hwy &	AM	25
Pacific Coast Commons South Dwy	PM	25





*De facto right turn

Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Revised Related Projects



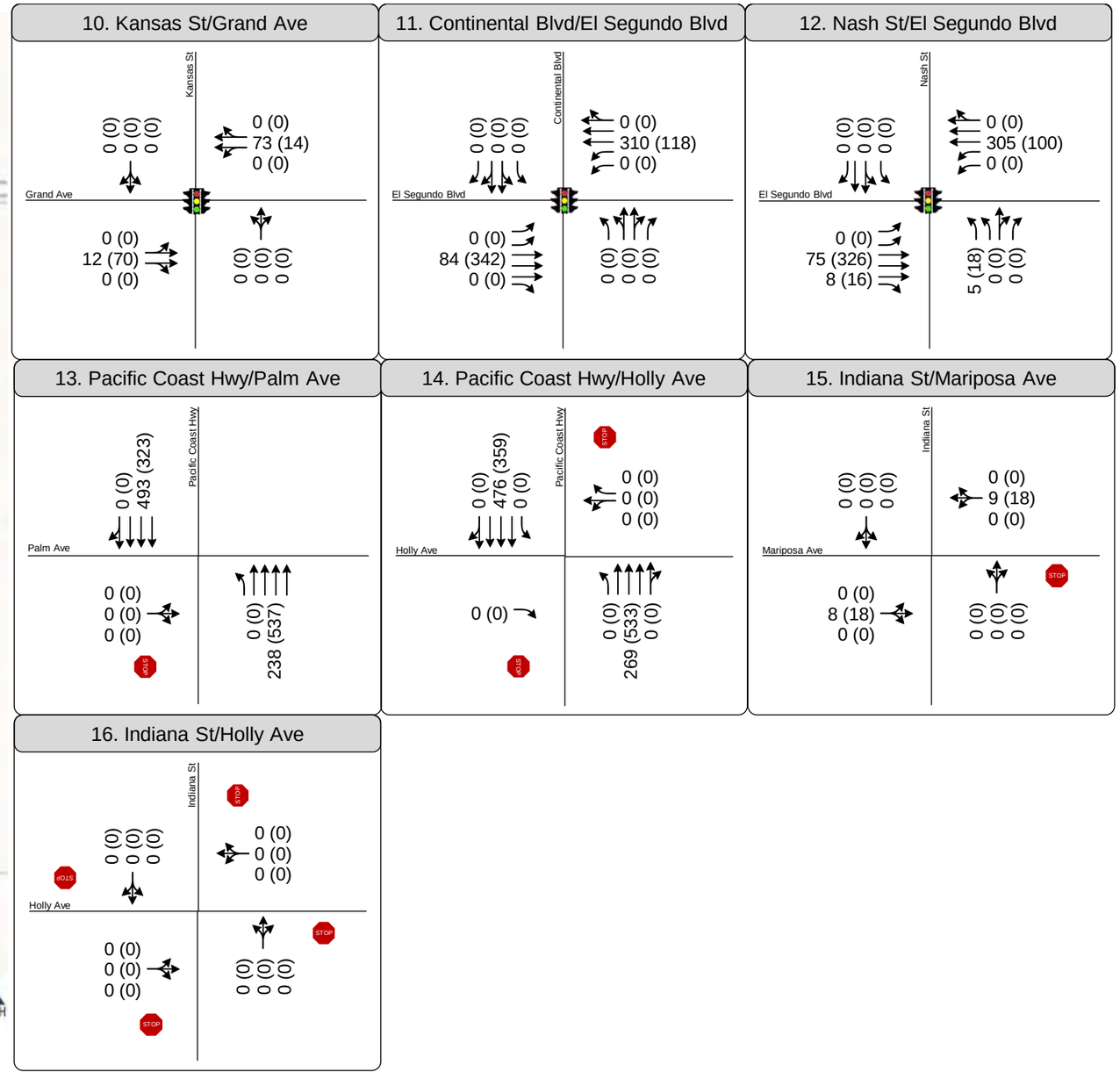
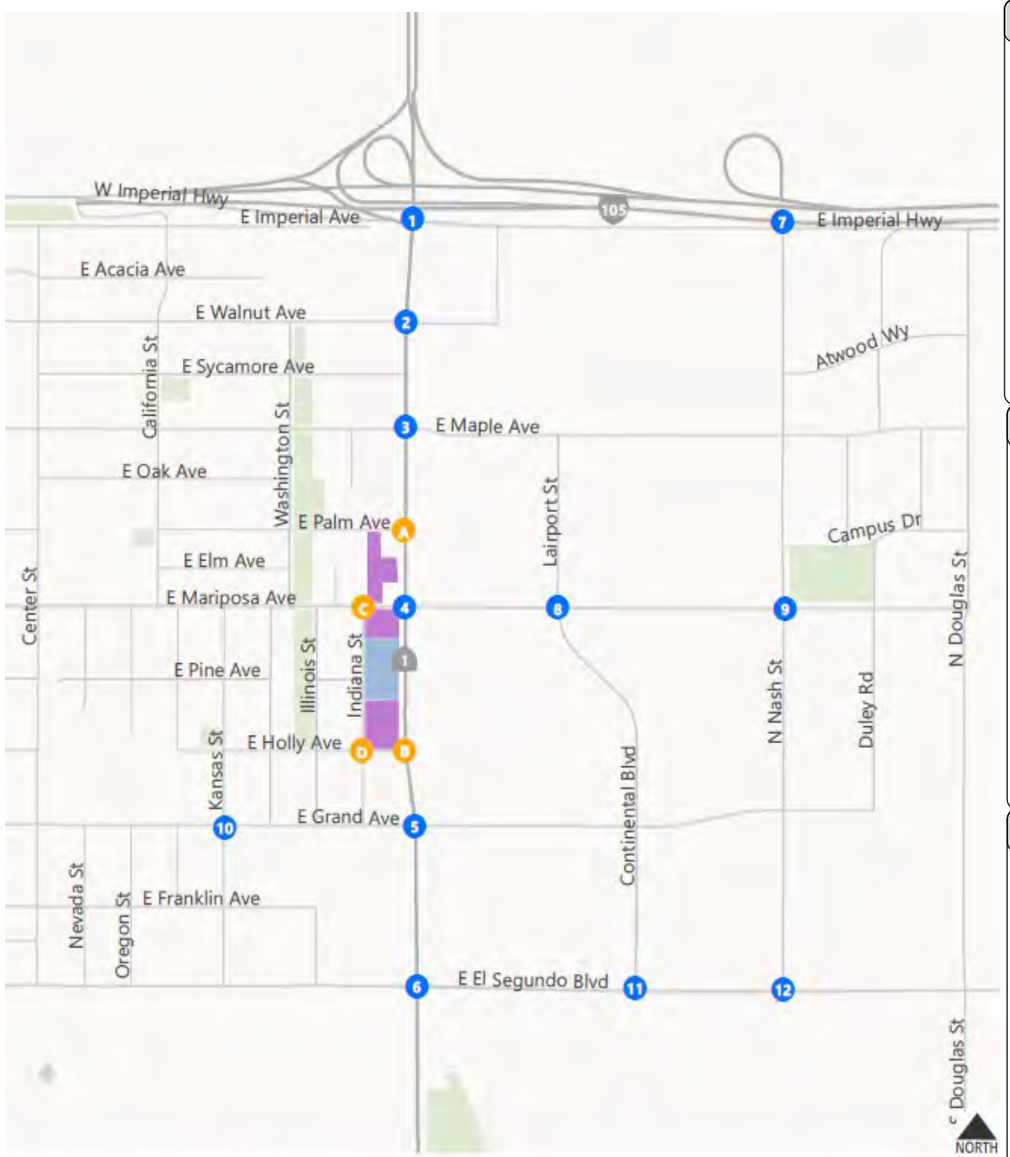
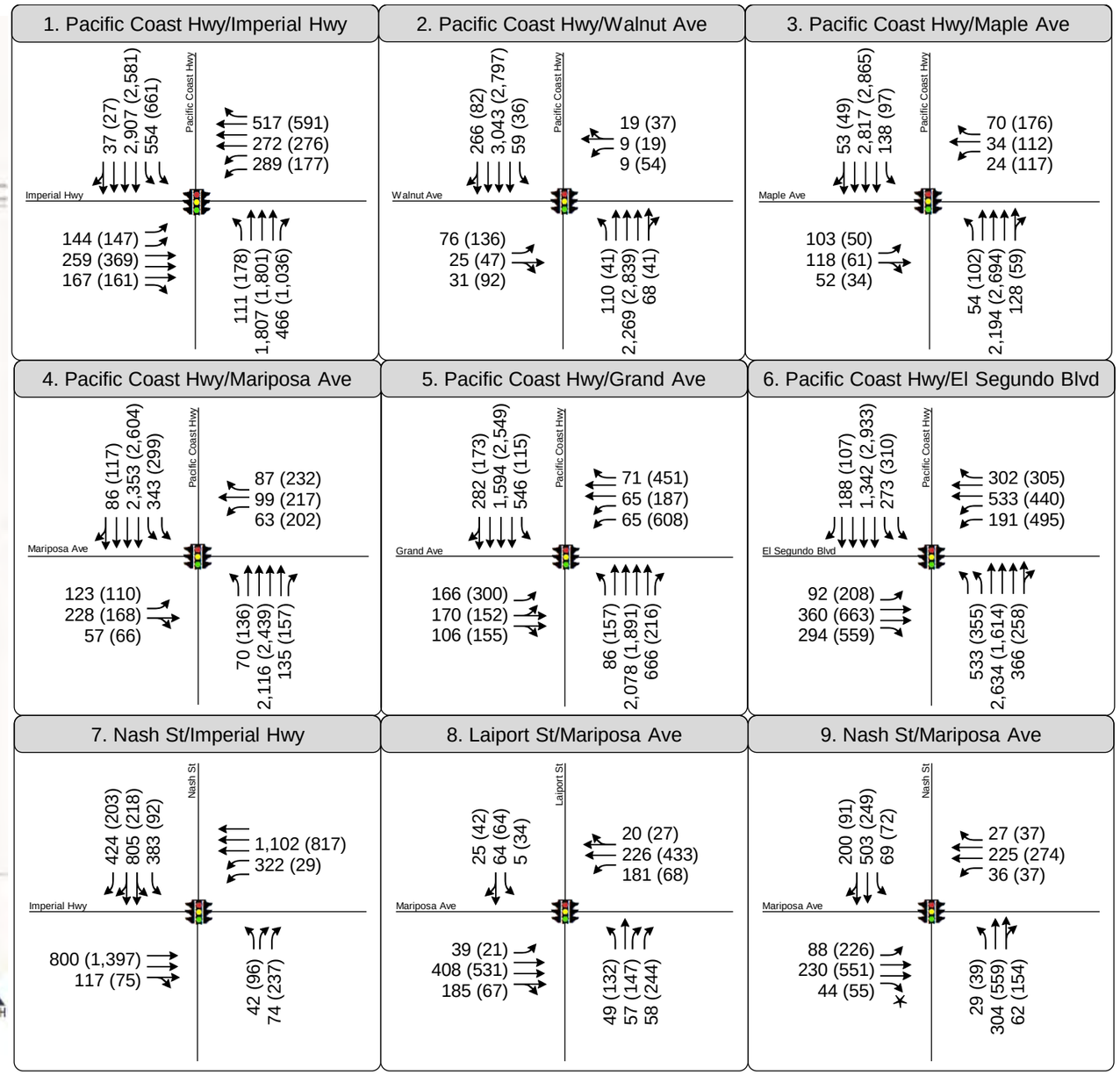


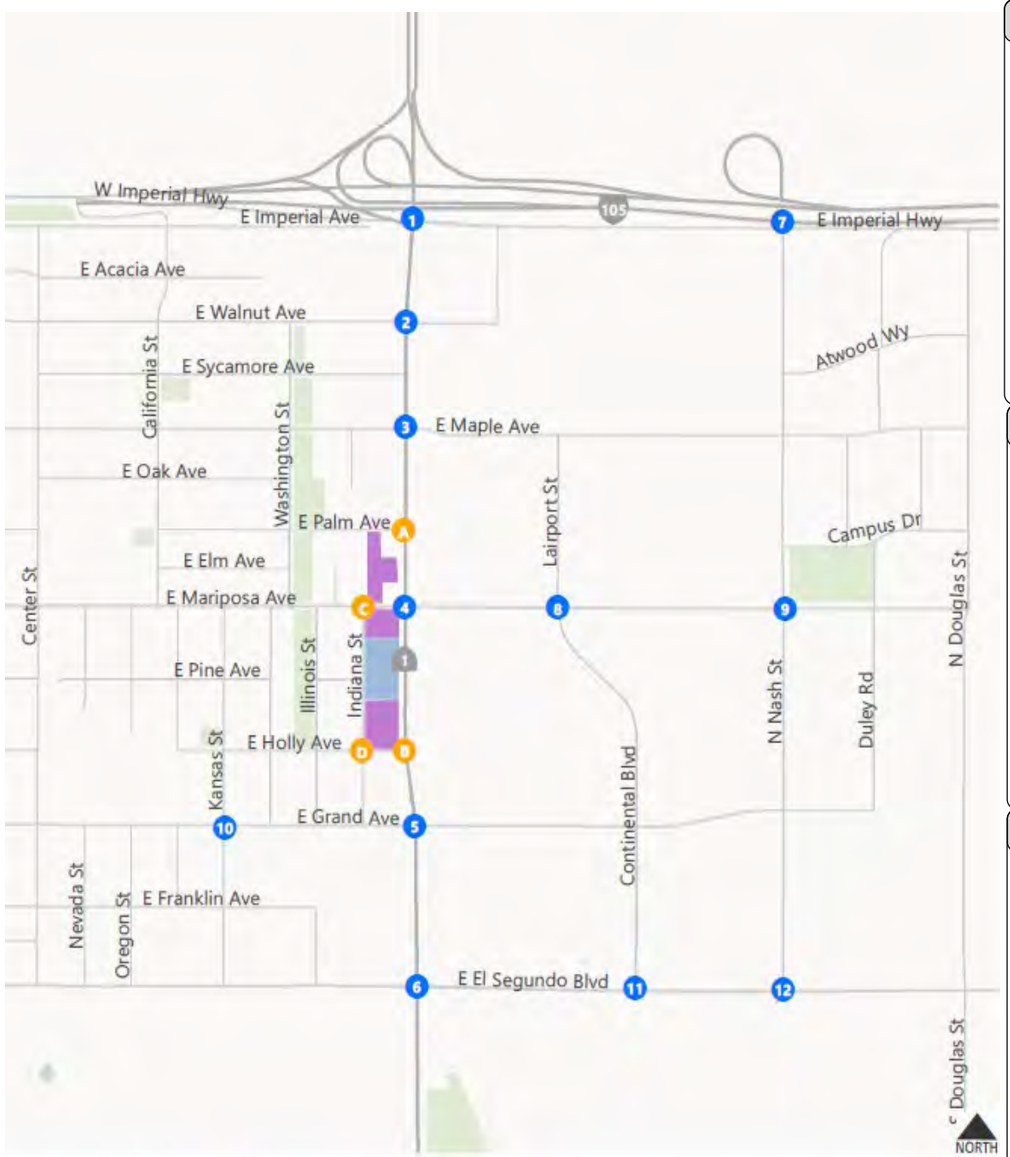
Figure 1
Peak Hour Traffic Volumes and Lane Configurations
Revised Related Projects

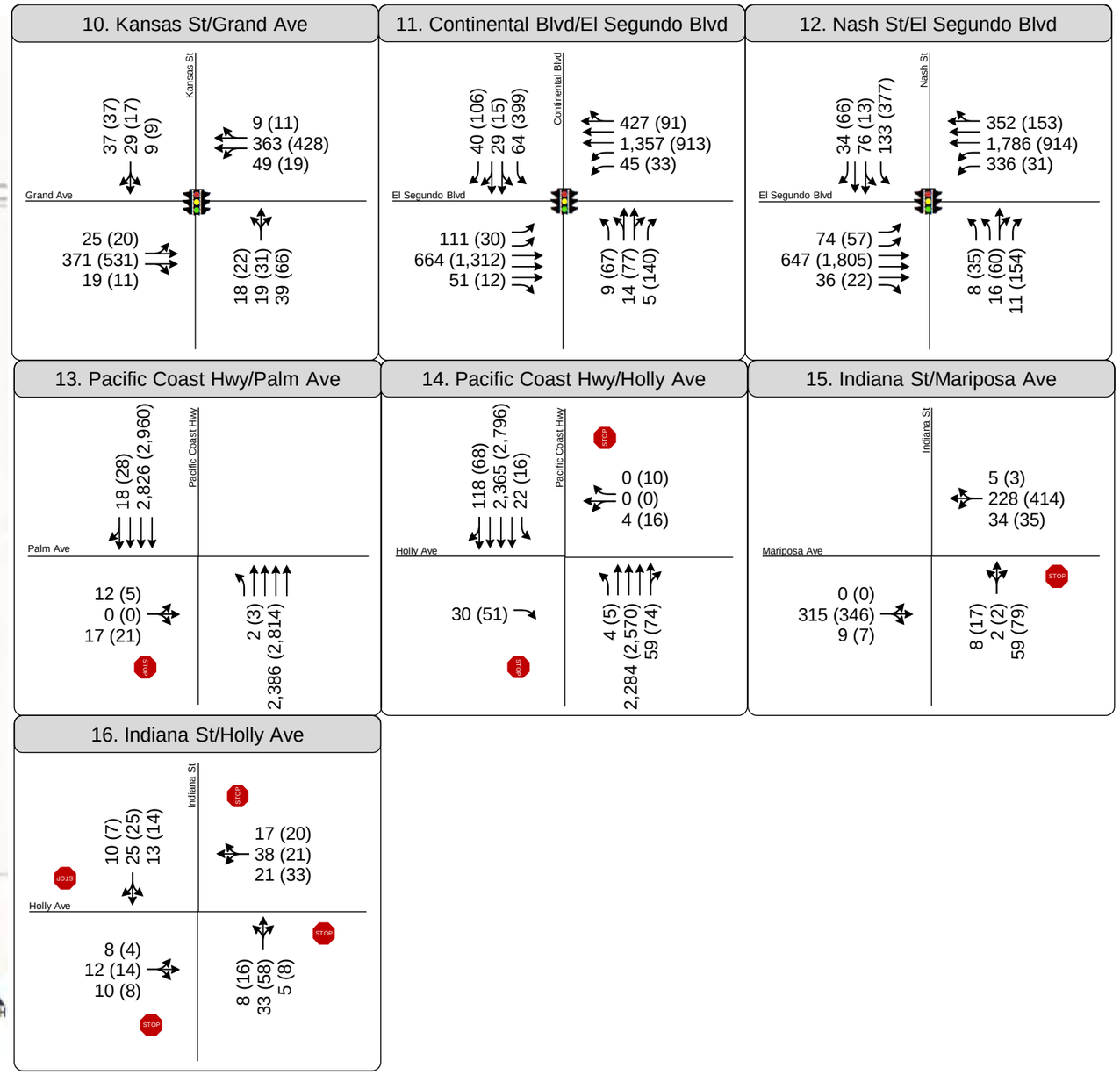




*De facto right turn

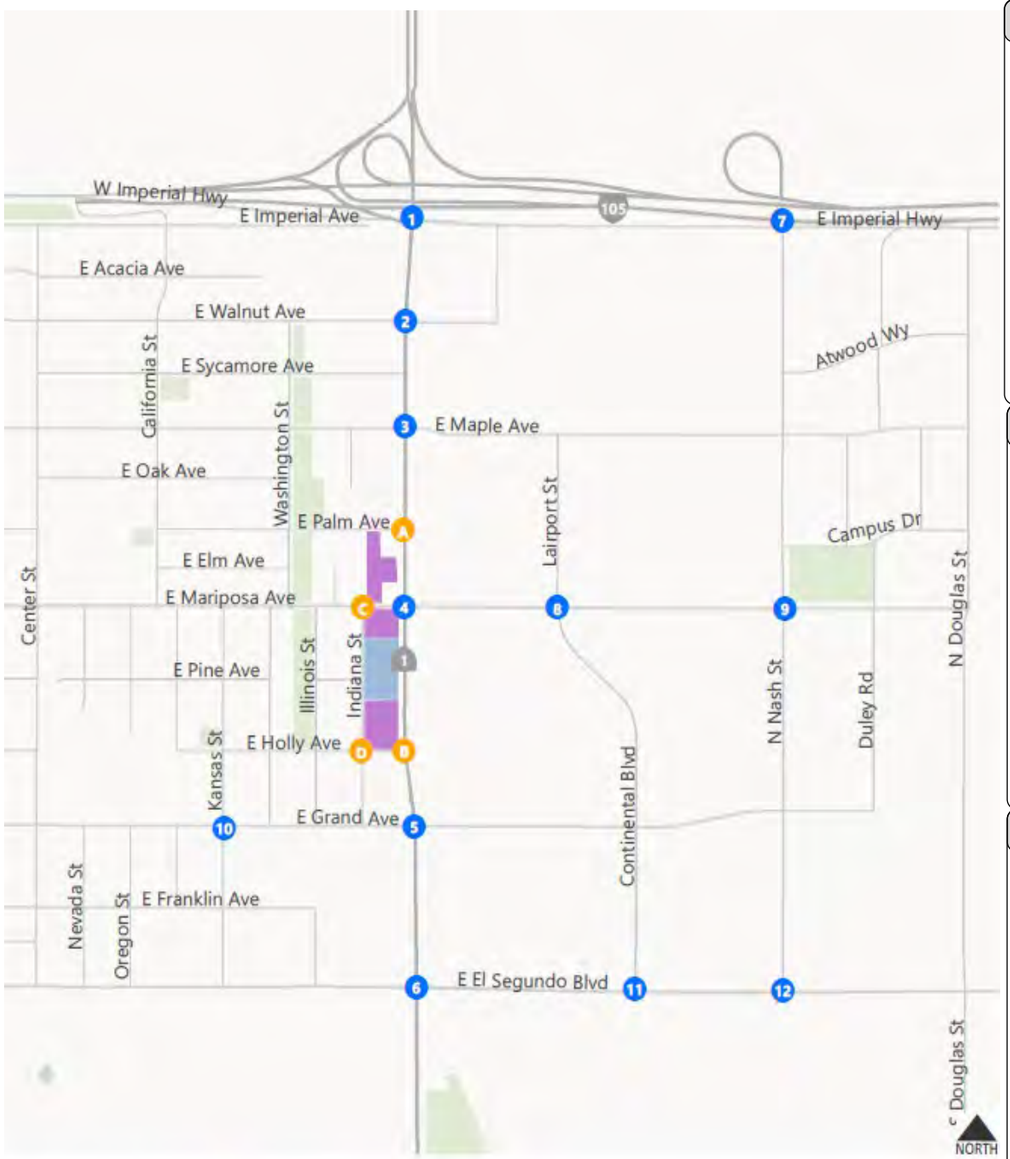
Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Revised Future (2027) Conditions

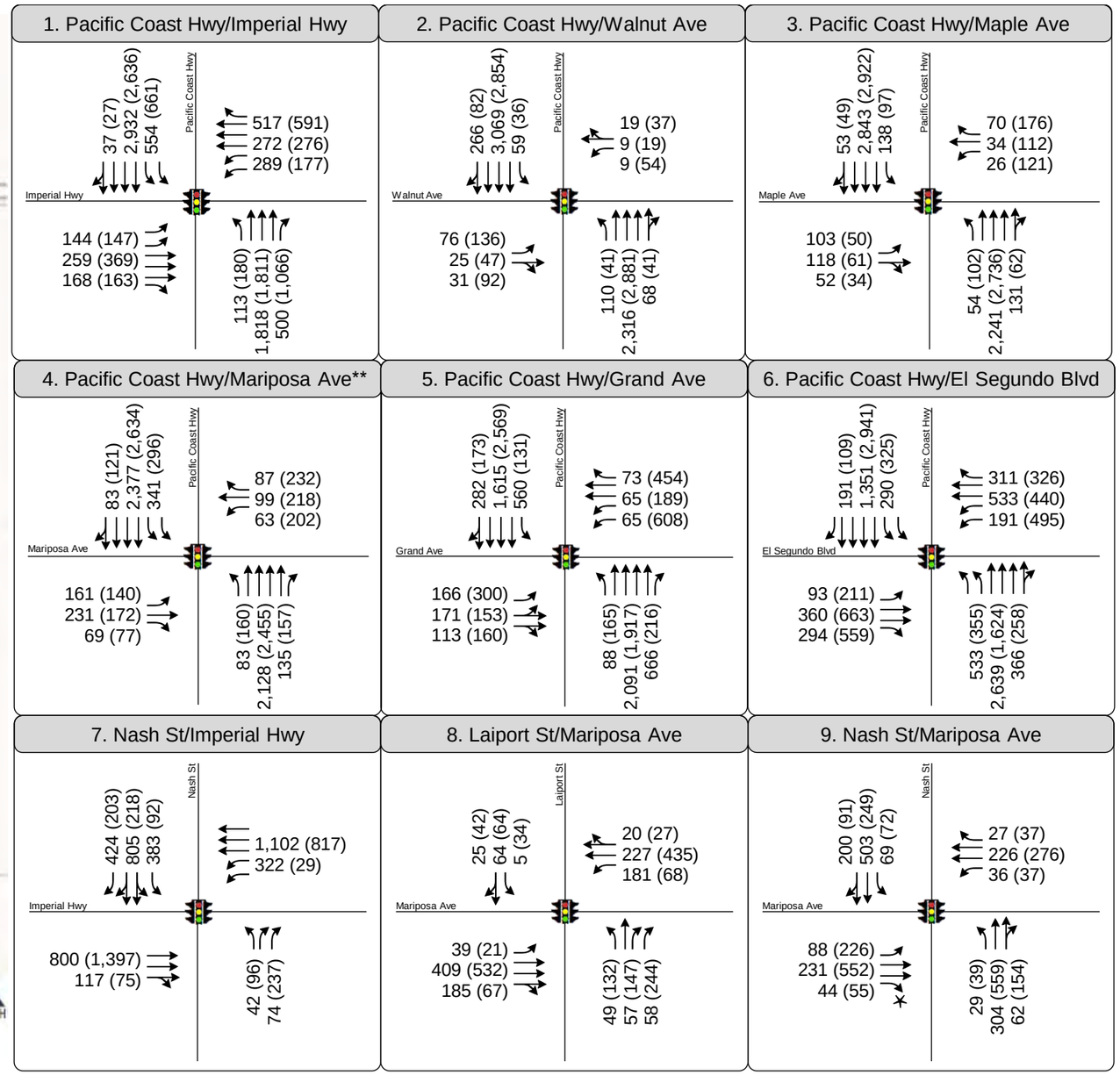




*De facto right turn

Figure 2
Peak Hour Traffic Volumes and Lane Configurations
Revised Future (2027) Conditions

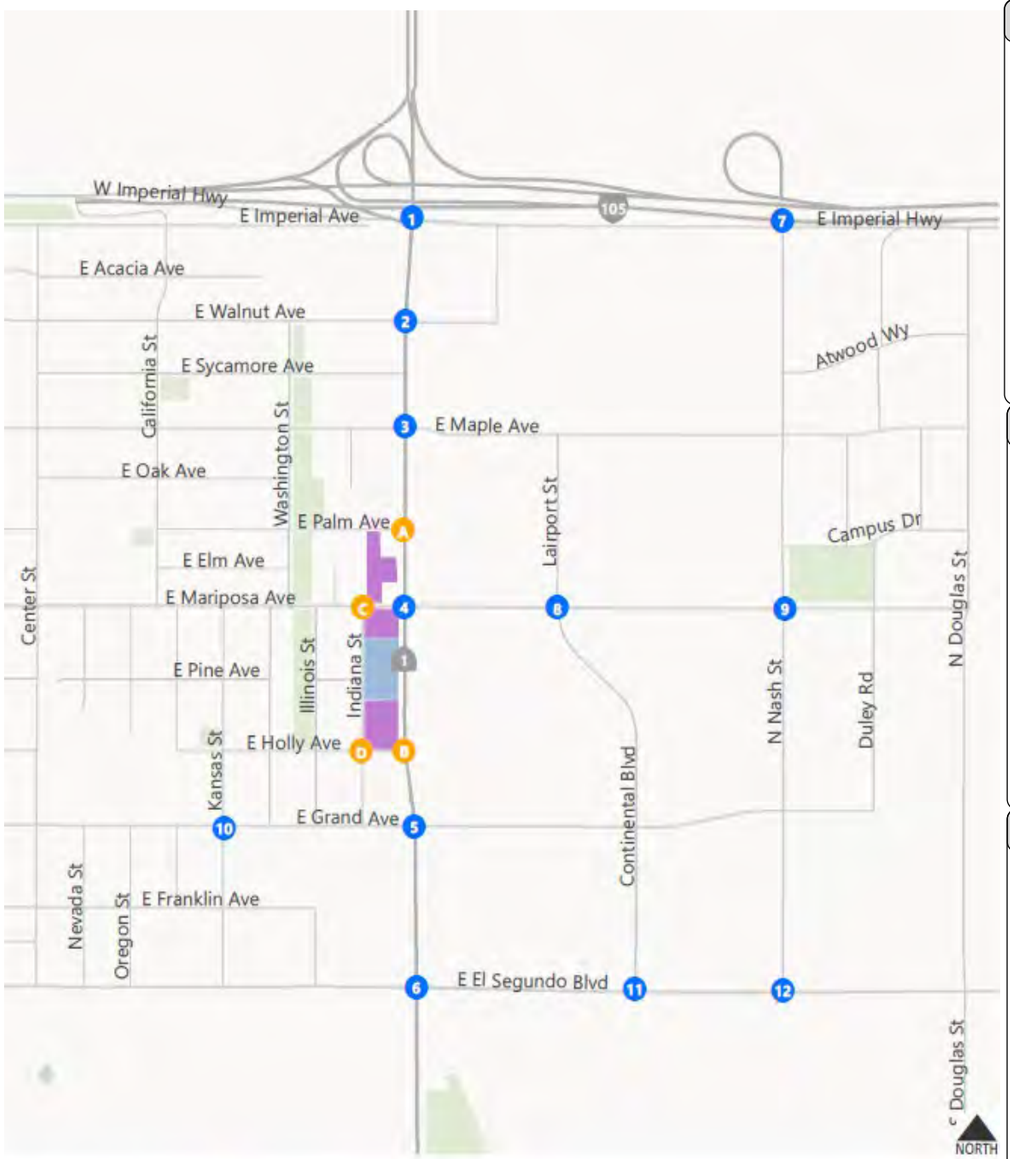




*De facto right turn

**As part of the project, the eastbound leg of Mariposa Avenue at Pacific Coast Highway (Intersection 4) will be reconfigured from one left lane and one through-right lane to one left, one through, and one right turn lane.

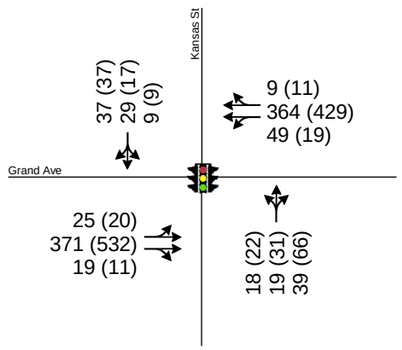
Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Revised Future + Project (2027) Conditions



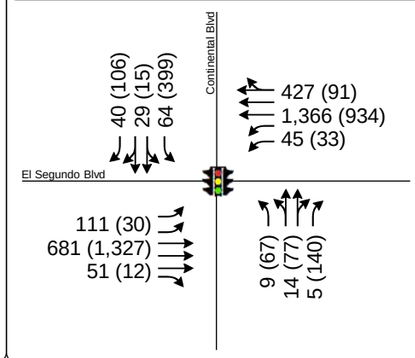
Study Intersections
- Signalized
- Unsignalized

Project Site
Existing Hotels

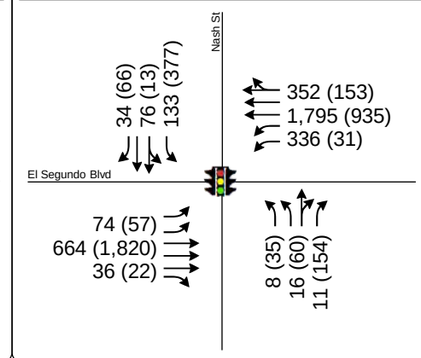
10. Kansas St/Grand Ave



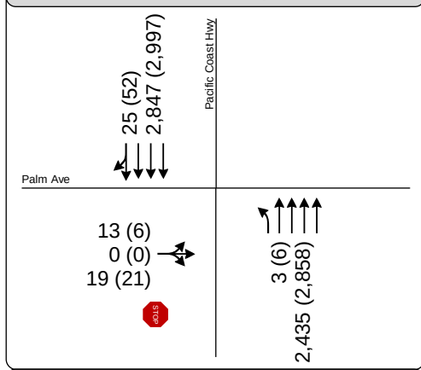
11. Continental Blvd/El Segundo Blvd



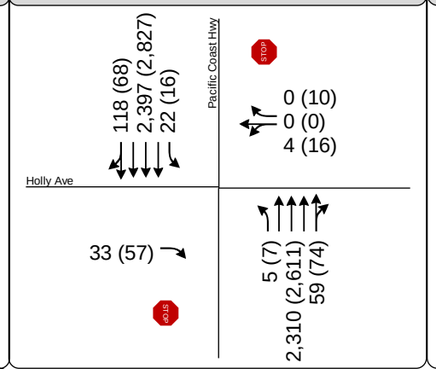
12. Nash St/El Segundo Blvd



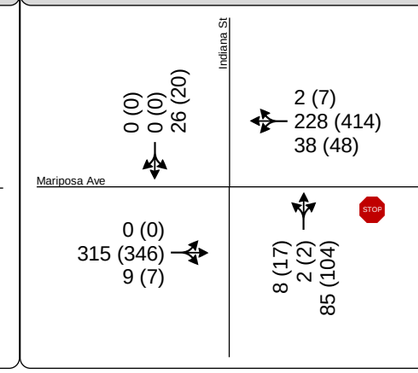
13. Pacific Coast Hwy/Palm Ave



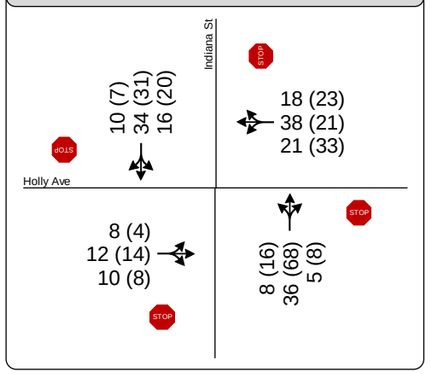
14. Pacific Coast Hwy/Holly Ave



15. Indiana St/Mariposa Ave



16. Indiana St/Holly Ave



*De facto right turn

Figure 3
Peak Hour Traffic Volumes and Lane Configurations
Revised Future + Project (2027) Conditions

ATTACHMENT A

Level of Service Analysis Worksheets

Project Title: **Pacific Coast Commons Project**
Intersection: **1 - Pacific Coast Hwy & Imperial Hwy**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	WBR		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.592 *
	TH	4.00	2,907	6,400	0.460	N-S(2):	0.529
	LT	2.00	554	2,560	0.216 *	E-W(1):	0.183 *
Westbound	RT	1.00	517	1,600	0.107	E-W(2):	0.163
	TH	3.00	272	4,800	0.057		
	LT	2.00	289	2,560	0.113 *	V/C:	0.775
Northbound	RT	1.00	466	1,600	0.235	Lost Time:	0.100
	TH	3.00	1,807	4,800	0.376 *	ITS:	0.000
	LT	1.00	111	1,600	0.069		
Eastbound	RT	1.00	167	1,600	0.070 *	ICU:	0.875
	TH	3.00	259	4,800	0.054		
	LT	2.00	144	2,560	0.056	LOS:	D

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000	N-S(1):	0.871 *
	TH	4.00	2,581	6,400	0.408	N-S(2):	0.519
	LT	2.00	661	2,560	0.258 *	E-W(1):	0.146
Westbound	RT	1.00	591	1,600	0.111 *	E-W(2):	0.168 *
	TH	3.00	276	4,800	0.058		
	LT	2.00	177	2,560	0.069	V/C:	1.039
Northbound	RT	1.00	1,036	1,600	0.613 *	Lost Time:	0.100
	TH	3.00	1,801	4,800	0.375	ITS:	0.000
	LT	1.00	178	1,600	0.111		
Eastbound	RT	1.00	161	1,600	0.045	ICU:	1.139
	TH	3.00	369	4,800	0.077		
	LT	2.00	147	2,560	0.057 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **2 - Pacific Coast Hwy & Walnut Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	266	0	0.000	N-S(1):	0.402
	TH	4.00	3,043	6,400	0.517 *	N-S(2):	0.586 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.041
Westbound	RT	0.68	19	1,086	0.000	E-W(2):	0.066 *
	TH	0.32	9	514	0.018 *		
	LT	1.00	9	1,600	0.006	V/C:	0.652
Northbound	RT	0.00	68	0	0.000	Lost Time:	0.100
	TH	4.00	2,269	6,400	0.365	ITS:	0.000
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.55	31	886	0.001	ICU:	0.752
	TH	0.45	25	714	0.035		
	LT	1.00	76	1,600	0.048 *	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.473
	TH	4.00	2,797	6,400	0.450 *	N-S(2):	0.476 *
	LT	1.00	36	1,600	0.023	E-W(1):	0.121 *
Westbound	RT	0.66	37	1,057	0.024	E-W(2):	0.120
	TH	0.34	19	543	0.035		
	LT	1.00	54	1,600	0.034 *	V/C:	0.597
Northbound	RT	0.00	41	0	0.000	Lost Time:	0.100
	TH	4.00	2,839	6,400	0.450	ITS:	0.000
	LT	1.00	41	1,600	0.026 *		
Eastbound	RT	0.66	92	1,059	0.074	ICU:	0.697
	TH	0.34	47	541	0.087 *		
	LT	1.00	136	1,600	0.085	LOS:	B

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **3 - Pacific Coast Hwy & Maple Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	53	0	0.000	N-S(1):	0.449
	TH	4.00	2,817	6,400	0.448 *	N-S(2):	0.482 *
	LT	1.00	138	1,600	0.086	E-W(1):	0.121 *
Westbound	RT	1.00	70	1,600	0.001	E-W(2):	0.085
	TH	1.00	34	1,600	0.021		
	LT	1.00	24	1,600	0.015 *	V/C:	0.603
Northbound	RT	0.00	128	0	0.000	Lost Time:	0.100
	TH	4.00	2,194	6,400	0.363	ITS:	0.000
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.31	52	489	0.089	ICU:	0.703
	TH	0.69	118	1,111	0.106 *		
	LT	1.00	103	1,600	0.064	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.491
	TH	4.00	2,865	6,400	0.455 *	N-S(2):	0.519 *
	LT	1.00	97	1,600	0.061	E-W(1):	0.132 *
Westbound	RT	1.00	176	1,600	0.080	E-W(2):	0.111
	TH	1.00	112	1,600	0.070		
	LT	1.00	117	1,600	0.073 *	V/C:	0.651
Northbound	RT	0.00	59	0	0.000	Lost Time:	0.100
	TH	4.00	2,694	6,400	0.430	ITS:	0.000
	LT	1.00	102	1,600	0.064 *		
Eastbound	RT	0.36	34	573	0.028	ICU:	0.751
	TH	0.64	61	1,027	0.059 *		
	LT	1.00	50	1,600	0.031	LOS:	C

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **4 - Pacific Coast Hwy & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	86	0	0.000	N-S(1):	0.465 *
	TH	4.00	2,353	6,400	0.381	N-S(2):	0.425
	LT	2.00	343	2,560	0.134 *	E-W(1):	0.217 *
Westbound	RT	1.00	87	1,600	0.000	E-W(2):	0.139
	TH	1.00	99	1,600	0.062		
	LT	1.00	63	1,600	0.039 *	V/C:	0.682
Northbound	RT	1.00	135	1,600	0.065	Lost Time:	0.100
	TH	4.00	2,116	6,400	0.331 *	ITS:	0.000
	LT	1.00	70	1,600	0.044		
Eastbound	RT	0.20	57	320	0.156	ICU:	0.782
	TH	0.80	228	1,280	0.178 *		
	LT	1.00	123	1,600	0.077	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	117	0	0.000	N-S(1):	0.498
	TH	4.00	2,604	6,400	0.425 *	N-S(2):	0.510 *
	LT	2.00	299	2,560	0.117	E-W(1):	0.272 *
Westbound	RT	1.00	232	1,600	0.087	E-W(2):	0.205
	TH	1.00	217	1,600	0.136		
	LT	1.00	202	1,600	0.126 *	V/C:	0.782
Northbound	RT	1.00	157	1,600	0.035	Lost Time:	0.100
	TH	4.00	2,439	6,400	0.381	ITS:	0.000
	LT	1.00	136	1,600	0.085 *		
Eastbound	RT	0.28	66	451	0.104	ICU:	0.882
	TH	0.72	168	1,149	0.146 *		
	LT	1.00	110	1,600	0.069	LOS:	D

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **5 - Pacific Coast Hwy & Grand Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	NBR,		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	282	0	0.000	N-S(1):	0.732 *
	TH	4.00	1,594	6,400	0.293	N-S(2):	0.347
	LT	1.00	546	1,600	0.341 *	E-W(1):	0.140 *
Westbound	RT	1.00	71	1,600	0.000	E-W(2):	0.000
	TH	2.00	65	3,200	0.020		
	LT	2.00	65	2,560	0.025 *	V/C:	0.872
Northbound	RT	1.00	666	1,600	0.391 *	Lost Time:	0.100
	TH	4.00	2,078	6,400	0.325	ITS:	0.000
	LT	1.00	86	1,600	0.054		
Eastbound	RT	0.00	106	0	0.000	ICU:	0.972
	TH	1.87	170	2,997	0.092		
	LT	1.13	166	1,442	0.115 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	173	0	0.000	N-S(1):	0.367
	TH	4.00	2,549	6,400	0.425 *	N-S(2):	0.523 *
	LT	1.00	115	1,600	0.072	E-W(1):	0.404 *
Westbound	RT	1.00	451	1,600	0.246 *	E-W(2):	0.000
	TH	2.00	187	3,200	0.058		
	LT	2.00	608	2,560	0.238	V/C:	0.927
Northbound	RT	1.00	216	1,600	0.000	Lost Time:	0.100
	TH	4.00	1,891	6,400	0.295	ITS:	0.000
	LT	1.00	157	1,600	0.098 *		
Eastbound	RT	0.00	155	0	0.000	ICU:	1.027
	TH	1.52	152	2,428	0.126		
	LT	1.48	300	1,898	0.158 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **6 - Pacific Coast Hwy & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	188	1,600	0.089	N-S(1):	0.576 *
	TH	4.00	1,342	6,400	0.210	N-S(2):	0.418
	LT	2.00	273	2,560	0.107 *	E-W(1):	0.188
Westbound	RT	1.00	302	1,600	0.135	E-W(2):	0.225 *
	TH	2.00	533	3,200	0.167 *		
	LT	2.00	191	2,560	0.075	V/C:	0.801
Northbound	RT	0.00	366	0	0.000	Lost Time:	0.100
	TH	4.00	2,634	6,400	0.469 *	ITS:	0.000
	LT	2.00	533	2,560	0.208		
Eastbound	RT	1.00	294	1,600	0.080	ICU:	0.901
	TH	2.00	360	3,200	0.113		
	LT	1.00	92	1,600	0.058 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	107	1,600	0.002	N-S(1):	0.414
	TH	4.00	2,933	6,400	0.458 *	N-S(2):	0.597 *
	LT	2.00	310	2,560	0.121	E-W(1):	0.473 *
Westbound	RT	1.00	305	1,600	0.130	E-W(2):	0.268
	TH	2.00	440	3,200	0.138		
	LT	2.00	495	2,560	0.193 *	V/C:	1.070
Northbound	RT	0.00	258	0	0.000	Lost Time:	0.100
	TH	4.00	1,614	6,400	0.293	ITS:	0.000
	LT	2.00	355	2,560	0.139 *		
Eastbound	RT	1.00	559	1,600	0.280 *	ICU:	1.170
	TH	2.00	663	3,200	0.207		
	LT	1.00	208	1,600	0.130	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **7 - Nash St & Imperial Hwy**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.03	424	1,656	0.256	N-S(1):	0.282 *
	TH	1.97	805	3,144	0.256 *	N-S(2):	0.000
	LT	1.00	383	1,600	0.239	E-W(1):	0.317 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.230
	TH	3.00	1,102	4,800	0.230		
	LT	2.00	322	2,560	0.126 *	V/C:	0.599
Northbound	RT	2.00	74	3,200	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	42	1,600	0.026 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.699
	TH	3.00	800	4,800	0.191 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.45	203	2,314	0.088	N-S(1):	0.156 *
	TH	1.55	218	2,486	0.088 *	N-S(2):	0.000
	LT	1.00	92	1,600	0.058	E-W(1):	0.318 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.170
	TH	3.00	817	4,800	0.170		
	LT	2.00	29	2,560	0.011 *	V/C:	0.474
Northbound	RT	2.00	237	3,200	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	96	1,600	0.060		
Eastbound	RT	0.00	75	0	0.000	ICU:	0.574
	TH	3.00	1,397	4,800	0.307 *		
	LT	0.00	0	0	0.000	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **8 - Laiport St & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.28	25	449	0.043	N-S(1):	0.039
	TH	0.72	64	1,151	0.056 *	N-S(2):	0.087 *
	LT	1.00	5	1,600	0.003	E-W(1):	0.237 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.101
	TH	2.00	226	3,200	0.077		
	LT	1.00	181	1,600	0.113 *	V/C:	0.324
Northbound	RT	2.00	58	3,200	0.000	Lost Time:	0.100
	TH	1.00	57	1,600	0.036	ITS:	0.000
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	0.424
	TH	3.00	408	4,800	0.124 *		
	LT	1.00	39	1,600	0.024	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.40	42	634	0.060	N-S(1):	0.113
	TH	0.60	64	966	0.066 *	N-S(2):	0.149 *
	LT	1.00	34	1,600	0.021	E-W(1):	0.168 *
Westbound	RT	0.00	27	0	0.000	E-W(2):	0.157
	TH	2.00	433	3,200	0.144		
	LT	1.00	68	1,600	0.043 *	V/C:	0.317
Northbound	RT	2.00	244	3,200	0.055	Lost Time:	0.100
	TH	1.00	147	1,600	0.092	ITS:	0.000
	LT	1.00	132	1,600	0.083 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.417
	TH	3.00	531	4,800	0.125 *		
	LT	1.00	21	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **9 - Nash St & Mariposa Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	200	0	0.000	N-S(1):	0.157
	TH	2.00	503	3,200	0.220 *	N-S(2):	0.238 *
	LT	1.00	69	1,600	0.043	E-W(1):	0.095
Westbound	RT	1.00	27	1,600	0.000	E-W(2):	0.125 *
	TH	2.00	225	3,200	0.070 *		
	LT	1.00	36	1,600	0.023	V/C:	0.363
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	2.00	304	3,200	0.114	ITS:	0.000
	LT	1.00	29	1,600	0.018 *		
Eastbound	RT	1.00	44	1,600	0.018	ICU:	0.463
	TH	2.00	230	3,200	0.072		
	LT	1.00	88	1,600	0.055 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.268 *
	TH	2.00	249	3,200	0.106	N-S(2):	0.130
	LT	1.00	72	1,600	0.045 *	E-W(1):	0.195
Westbound	RT	1.00	37	1,600	0.001	E-W(2):	0.227 *
	TH	2.00	274	3,200	0.086 *		
	LT	1.00	37	1,600	0.023	V/C:	0.495
Northbound	RT	0.00	154	0	0.000	Lost Time:	0.100
	TH	2.00	559	3,200	0.223 *	ITS:	0.000
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	55	1,600	0.022	ICU:	0.595
	TH	2.00	551	3,200	0.172		
	LT	1.00	226	1,600	0.141 *	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **10 - Kansas St & Grand Ave**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.054
	TH	1.00	29	1,600	0.047 *	N-S(2):	0.058 *
	LT	0.00	9	1,600	0.006	E-W(1):	0.161 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.148
	TH	2.00	363	1,600	0.132		
	LT	0.00	49	1,600	0.031 *	V/C:	0.219
Northbound	RT	0.00	39	0	0.000	Lost Time:	0.100
	TH	1.00	19	1,600	0.048	ITS:	0.000
	LT	0.00	18	1,600	0.011 *		
Eastbound	RT	0.00	19	0	0.000	ICU:	0.319
	TH	2.00	371	1,600	0.130 *		
	LT	0.00	25	1,600	0.016	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.080 *
	TH	1.00	17	1,600	0.039	N-S(2):	0.053
	LT	0.00	9	1,600	0.006 *	E-W(1):	0.188 *
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.156
	TH	2.00	428	1,600	0.143		
	LT	0.00	19	1,600	0.012 *	V/C:	0.268
Northbound	RT	0.00	66	0	0.000	Lost Time:	0.100
	TH	1.00	31	1,600	0.074 *	ITS:	0.000
	LT	0.00	22	1,600	0.014		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.368
	TH	2.00	531	1,600	0.176 *		
	LT	0.00	20	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **11 - Continental Blvd & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.20	40	1,925	0.000	N-S(1):	0.032 *
	TH	0.87	29	1,395	0.021	N-S(2):	0.000
	LT	1.92	64	2,464	0.026 *	E-W(1):	0.156
Westbound	RT	0.00	427	0	0.000	E-W(2):	0.415 *
	TH	3.00	1,357	4,800	0.372 *		
	LT	2.00	45	2,560	0.018	V/C:	0.447
Northbound	RT	1.00	5	1,600	0.000	Lost Time:	0.100
	TH	1.83	14	2,922	0.005	ITS:	0.000
	LT	1.17	9	1,503	0.006 *		
Eastbound	RT	1.00	51	1,600	0.029	ICU:	0.547
	TH	3.00	664	4,800	0.138		
	LT	2.00	111	2,560	0.043 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.75	106	2,803	0.032	N-S(1):	0.201 *
	TH	0.25	15	397	0.038	N-S(2):	0.000
	LT	2.00	399	2,560	0.156 *	E-W(1):	0.286 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.221
	TH	3.00	913	4,800	0.209		
	LT	2.00	33	2,560	0.013 *	V/C:	0.487
Northbound	RT	1.94	140	3,097	0.039	Lost Time:	0.100
	TH	1.06	77	1,703	0.045 *	ITS:	0.000
	LT	1.00	67	1,600	0.042		
Eastbound	RT	1.00	12	1,600	0.000	ICU:	0.587
	TH	3.00	1,312	4,800	0.273 *		
	LT	2.00	30	2,560	0.012	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **12 - Nash St & El Segundo Blvd**
Description: **Future Base (2027) (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	34	1,600	0.007	N-S(1):	0.064 *
	TH	1.09	76	1,745	0.044	N-S(2):	0.000
	LT	1.91	133	2,444	0.054 *	E-W(1):	0.266
Westbound	RT	0.00	352	0	0.000	E-W(2):	0.474 *
	TH	3.00	1,786	4,800	0.445 *		
	LT	2.00	336	2,560	0.131	V/C:	0.538
Northbound	RT	1.00	11	1,600	0.000	Lost Time:	0.100
	TH	1.00	16	1,600	0.010 *	ITS:	0.000
	LT	2.00	8	2,560	0.003		
Eastbound	RT	1.00	36	1,600	0.021	ICU:	0.638
	TH	3.00	647	4,800	0.135		
	LT	2.00	74	2,560	0.029 *	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.030	N-S(1):	0.214 *
	TH	1.00	13	1,600	0.008	N-S(2):	0.000
	LT	2.00	377	2,560	0.147 *	E-W(1):	0.388 *
Westbound	RT	0.00	153	0	0.000	E-W(2):	0.244
	TH	3.00	914	4,800	0.222		
	LT	2.00	31	2,560	0.012 *	V/C:	0.602
Northbound	RT	1.44	154	2,303	0.061	Lost Time:	0.100
	TH	0.56	60	897	0.067 *	ITS:	0.000
	LT	2.00	35	2,560	0.014		
Eastbound	RT	1.00	22	1,600	0.007	ICU:	0.702
	TH	3.00	1,805	4,800	0.376 *		
	LT	2.00	57	2,560	0.022	LOS:	C

* - Denotes critical movement

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	17	2	1850	2243	18
Future Vol, veh/h	12	17	2	1850	2243	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	18	2	2011	2438	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3256	1229	2458	0	-	0
Stage 1	2448	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	19	146	73	-	-	-
Stage 1	29	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	18	146	73	-	-	-
Mov Cap-2 Maneuver	18	-	-	-	-	-
Stage 1	28	-	-	-	-	-
Stage 2	362	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	265	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	73	-	37	-	-
HCM Lane V/C Ratio	0.03	-	0.852	-	-
HCM Control Delay (s)	55.8	-	265	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	3.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	30	4	0	0	4	1780	59	22	1892	118
Future Vol, veh/h	0	0	30	4	0	0	4	1780	59	22	1892	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	33	4	0	0	4	1935	64	24	2057	128

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	1093	2846	4208	1000	2185	0	0	1999	0	0
Stage 1	-	-	-	1975	1975	-	-	-	-	-	-	-
Stage 2	-	-	-	871	2233	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	180	18	2	207	101	-	-	125	-	-
Stage 1	0	0	-	40	106	-	-	-	-	-	-	-
Stage 2	0	0	-	283	78	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	180	12	2	207	101	-	-	125	-	-
Mov Cap-2 Maneuver	-	-	-	12	2	-	-	-	-	-	-	-
Stage 1	-	-	-	38	102	-	-	-	-	-	-	-
Stage 2	-	-	-	187	63	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	29.4	$ 425.1	0.1	0.4
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	101	-	-	180	12	-	125	-	-
HCM Lane V/C Ratio	0.043	-	-	0.181	0.362	-	0.191	-	-
HCM Control Delay (s)	42.2	-	-	29.4	$ 425.1	0	40.5	-	-
HCM Lane LOS	E	-	-	D	F	A	E	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.9	-	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	21	3	2245	2300	28
Future Vol, veh/h	5	21	3	2245	2300	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	23	3	2440	2500	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3497	1265	2530	0	-	0
Stage 1	2515	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	14	138	67	-	-	-
Stage 1	26	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	13	138	67	-	-	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	25	-	-	-	-	-
Stage 2	292	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	156.1	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	67	-	48	-	-
HCM Lane V/C Ratio	0.049	-	0.589	-	-
HCM Control Delay (s)	61.5	-	156.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	2.2	-	-

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	51	16	0	10	5	2061	74	16	2187	68
Future Vol, veh/h	0	0	51	16	0	10	5	2061	74	16	2187	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	55	17	0	11	5	2240	80	17	2377	74

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1226	3275	4775	1160	2451	0	0	2320	0	0
Stage 1	-	-	-	2290	2290	-	-	-	-	-	-	-
Stage 2	-	-	-	985	2485	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	146	~ 10	1	162	73	-	-	86	-	-
Stage 1	0	0	-	24	73	-	-	-	-	-	-	-
Stage 2	0	0	-	240	58	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	146	~ 5	1	162	73	-	-	86	-	-
Mov Cap-2 Maneuver	-	-	-	~ 5	1	-	-	-	-	-	-	-
Stage 1	-	-	-	22	68	-	-	-	-	-	-	-
Stage 2	-	-	-	119	47	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	44	$ 1538.3	0.1	0.4
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	73	-	-	146	5	162	86	-	-
HCM Lane V/C Ratio	0.074	-	-	0.38	3.478	0.067	0.202	-	-
HCM Control Delay (s)	58.2	-	-	44	2481.7	28.8	57.2	-	-
HCM Lane LOS	F	-	-	E	F	D	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.6	3.4	0.2	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	315	9	34	228	5	8	2	59	0	0	0
Future Vol, veh/h	0	315	9	34	228	5	8	2	59	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	342	10	37	248	5	9	2	64	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	253	0	0	352	0	0	672	674	347
Stage 1	-	-	-	-	-	-	347	347	-
Stage 2	-	-	-	-	-	-	325	327	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1312	-	-	1207	-	-	421	376	696
Stage 1	-	-	-	-	-	-	716	635	-
Stage 2	-	-	-	-	-	-	732	648	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1312	-	-	1207	-	-	406	0	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	406	0	-
Stage 1	-	-	-	-	-	-	690	0	-
Stage 2	-	-	-	-	-	-	732	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	641	1312	-	-	1207	-	-
HCM Lane V/C Ratio	0.117	-	-	-	0.031	-	-
HCM Control Delay (s)	11.4	0	-	-	8.1	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	12	10	21	38	17	8	33	5	13	25	10
Future Vol, veh/h	8	12	10	21	38	17	8	33	5	13	25	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	13	11	23	41	18	9	36	5	14	27	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.2	7.5	7.5	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	27%	28%	27%
Vol Thru, %	72%	40%	50%	52%
Vol Right, %	11%	33%	22%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	30	76	48
LT Vol	8	8	21	13
Through Vol	33	12	38	25
RT Vol	5	10	17	10
Lane Flow Rate	50	33	83	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.058	0.036	0.093	0.059
Departure Headway (Hd)	4.142	4.026	4.055	4.1
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	879	876	865
Service Time	2.207	2.096	2.114	2.165
HCM Lane V/C Ratio	0.058	0.038	0.095	0.06
HCM Control Delay	7.5	7.2	7.5	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	346	7	35	414	3	17	2	79	0	0	0
Future Vol, veh/h	0	346	7	35	414	3	17	2	79	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	376	8	38	450	3	18	2	86	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	453	0	0	384	0	0	908	909	380
Stage 1	-	-	-	-	-	-	380	380	-
Stage 2	-	-	-	-	-	-	528	529	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1108	-	-	1174	-	-	306	275	667
Stage 1	-	-	-	-	-	-	691	614	-
Stage 2	-	-	-	-	-	-	592	527	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1108	-	-	1174	-	-	293	0	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	293	0	-
Stage 1	-	-	-	-	-	-	661	0	-
Stage 2	-	-	-	-	-	-	592	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	544	1108	-	-	1174	-	-
HCM Lane V/C Ratio	0.196	-	-	-	0.032	-	-
HCM Control Delay (s)	13.2	0	-	-	8.2	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.7	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	14	8	33	21	20	16	58	8	14	25	7
Future Vol, veh/h	4	14	8	33	21	20	16	58	8	14	25	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	15	9	36	23	22	17	63	9	15	27	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.6	7.7	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	20%	15%	45%	30%
Vol Thru, %	71%	54%	28%	54%
Vol Right, %	10%	31%	27%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	82	26	74	46
LT Vol	16	4	33	14
Through Vol	58	14	21	25
RT Vol	8	8	20	7
Lane Flow Rate	89	28	80	50
Geometry Grp	1	1	1	1
Degree of Util (X)	0.103	0.032	0.092	0.058
Departure Headway (Hd)	4.14	4.082	4.122	4.16
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	863	858	851
Service Time	2.207	2.175	2.201	2.236
HCM Lane V/C Ratio	0.104	0.032	0.093	0.059
HCM Control Delay	7.7	7.3	7.6	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.3	0.2

Project Title: **Pacific Coast Commons Project**
Intersection: **1 - Pacific Coast Hwy & Imperial Hwy**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	WBR		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.595 *
	TH	4.00	2,932	6,400	0.464	N-S(2):	0.535
	LT	2.00	554	2,560	0.216 *	E-W(1):	0.183 *
Westbound	RT	1.00	517	1,600	0.107	E-W(2):	0.163
	TH	3.00	272	4,800	0.057		
	LT	2.00	289	2,560	0.113 *	V/C:	0.778
Northbound	RT	1.00	500	1,600	0.256	Lost Time:	0.100
	TH	3.00	1,818	4,800	0.379 *	ITS:	0.000
	LT	1.00	113	1,600	0.071		
Eastbound	RT	1.00	168	1,600	0.070 *	ICU:	0.878
	TH	3.00	259	4,800	0.054		
	LT	2.00	144	2,560	0.056	LOS:	D

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	27	0	0.000	N-S(1):	0.890 *
	TH	4.00	2,636	6,400	0.416	N-S(2):	0.529
	LT	2.00	661	2,560	0.258 *	E-W(1):	0.146
Westbound	RT	1.00	591	1,600	0.111 *	E-W(2):	0.168 *
	TH	3.00	276	4,800	0.058		
	LT	2.00	177	2,560	0.069	V/C:	1.058
Northbound	RT	1.00	1,066	1,600	0.632 *	Lost Time:	0.100
	TH	3.00	1,811	4,800	0.377	ITS:	0.000
	LT	1.00	180	1,600	0.113		
Eastbound	RT	1.00	163	1,600	0.046	ICU:	1.158
	TH	3.00	369	4,800	0.077		
	LT	2.00	147	2,560	0.057 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **2 - Pacific Coast Hwy & Walnut Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	266	0	0.000	N-S(1):	0.410
	TH	4.00	3,069	6,400	0.521 *	N-S(2):	0.590 *
	LT	1.00	59	1,600	0.037	E-W(1):	0.041
Westbound	RT	0.68	19	1,086	0.000	E-W(2):	0.066 *
	TH	0.32	9	514	0.018 *		
	LT	1.00	9	1,600	0.006	V/C:	0.656
Northbound	RT	0.00	68	0	0.000	Lost Time:	0.100
	TH	4.00	2,316	6,400	0.373	ITS:	0.000
	LT	1.00	110	1,600	0.069 *		
Eastbound	RT	0.55	31	886	0.001	ICU:	0.756
	TH	0.45	25	714	0.035		
	LT	1.00	76	1,600	0.048 *	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	82	0	0.000	N-S(1):	0.480
	TH	4.00	2,854	6,400	0.459 *	N-S(2):	0.485 *
	LT	1.00	36	1,600	0.023	E-W(1):	0.121 *
Westbound	RT	0.66	37	1,057	0.024	E-W(2):	0.120
	TH	0.34	19	543	0.035		
	LT	1.00	54	1,600	0.034 *	V/C:	0.606
Northbound	RT	0.00	41	0	0.000	Lost Time:	0.100
	TH	4.00	2,881	6,400	0.457	ITS:	0.000
	LT	1.00	41	1,600	0.026 *		
Eastbound	RT	0.66	92	1,059	0.074	ICU:	0.706
	TH	0.34	47	541	0.087 *		
	LT	1.00	136	1,600	0.085	LOS:	C

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **3 - Pacific Coast Hwy & Maple Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	53	0	0.000	N-S(1):	0.457
	TH	4.00	2,843	6,400	0.453 *	N-S(2):	0.487 *
	LT	1.00	138	1,600	0.086	E-W(1):	0.122 *
Westbound	RT	1.00	70	1,600	0.001	E-W(2):	0.085
	TH	1.00	34	1,600	0.021		
	LT	1.00	26	1,600	0.016 *	V/C:	0.609
Northbound	RT	0.00	131	0	0.000	Lost Time:	0.100
	TH	4.00	2,241	6,400	0.371	ITS:	0.000
	LT	1.00	54	1,600	0.034 *		
Eastbound	RT	0.31	52	489	0.089	ICU:	0.709
	TH	0.69	118	1,111	0.106 *		
	LT	1.00	103	1,600	0.064	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	49	0	0.000	N-S(1):	0.498
	TH	4.00	2,922	6,400	0.464 *	N-S(2):	0.528 *
	LT	1.00	97	1,600	0.061	E-W(1):	0.135 *
Westbound	RT	1.00	176	1,600	0.080	E-W(2):	0.111
	TH	1.00	112	1,600	0.070		
	LT	1.00	121	1,600	0.076 *	V/C:	0.663
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	4.00	2,736	6,400	0.437	ITS:	0.000
	LT	1.00	102	1,600	0.064 *		
Eastbound	RT	0.36	34	573	0.028	ICU:	0.763
	TH	0.64	61	1,027	0.059 *		
	LT	1.00	50	1,600	0.031	LOS:	C

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **4 - Pacific Coast Hwy & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	83	0	0.000	N-S(1):	0.466 *
	TH	4.00	2,377	6,400	0.384	N-S(2):	0.436
	LT	2.00	341	2,560	0.133 *	E-W(1):	0.183 *
Westbound	RT	1.00	87	1,600	0.000	E-W(2):	0.163
	TH	1.00	99	1,600	0.062		
	LT	1.00	63	1,600	0.039 *	V/C:	0.649
Northbound	RT	1.00	135	1,600	0.065	Lost Time:	0.100
	TH	4.00	2,128	6,400	0.333 *	ITS:	0.000
	LT	1.00	83	1,600	0.052		
Eastbound	RT	1.00	69	1,600	0.017	ICU:	0.749
	TH	1.00	231	1,600	0.144 *		
	LT	1.00	161	1,600	0.101	LOS:	C

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	121	0	0.000	N-S(1):	0.500
	TH	4.00	2,634	6,400	0.430 *	N-S(2):	0.530 *
	LT	2.00	296	2,560	0.116	E-W(1):	0.234 *
Westbound	RT	1.00	232	1,600	0.087	E-W(2):	0.224
	TH	1.00	218	1,600	0.136		
	LT	1.00	202	1,600	0.126 *	V/C:	0.764
Northbound	RT	1.00	157	1,600	0.035	Lost Time:	0.100
	TH	4.00	2,455	6,400	0.384	ITS:	0.000
	LT	1.00	160	1,600	0.100 *		
Eastbound	RT	1.00	77	1,600	0.000	ICU:	0.864
	TH	1.00	172	1,600	0.108 *		
	LT	1.00	140	1,600	0.088	LOS:	D

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **5 - Pacific Coast Hwy & Grand Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	Y
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :	NBR,		
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	282	0	0.000	N-S(1):	0.741 *
	TH	4.00	1,615	6,400	0.296	N-S(2):	0.351
	LT	1.00	560	1,600	0.350 *	E-W(1):	0.142 *
Westbound	RT	1.00	73	1,600	0.000	E-W(2):	0.000
	TH	2.00	65	3,200	0.020		
	LT	2.00	65	2,560	0.025 *	V/C:	0.883
Northbound	RT	1.00	666	1,600	0.391 *	Lost Time:	0.100
	TH	4.00	2,091	6,400	0.327	ITS:	0.000
	LT	1.00	88	1,600	0.055		
Eastbound	RT	0.00	113	0	0.000	ICU:	0.983
	TH	1.89	171	3,029	0.094		
	LT	1.11	166	1,417	0.117 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	173	0	0.000	N-S(1):	0.382
	TH	4.00	2,569	6,400	0.428 *	N-S(2):	0.531 *
	LT	1.00	131	1,600	0.082	E-W(1):	0.403 *
Westbound	RT	1.00	454	1,600	0.243 *	E-W(2):	0.000
	TH	2.00	189	3,200	0.059		
	LT	2.00	608	2,560	0.238	V/C:	0.934
Northbound	RT	1.00	216	1,600	0.000	Lost Time:	0.100
	TH	4.00	1,917	6,400	0.300	ITS:	0.000
	LT	1.00	165	1,600	0.103 *		
Eastbound	RT	0.00	160	0	0.000	ICU:	1.034
	TH	1.53	153	2,451	0.128		
	LT	1.47	300	1,879	0.160 *	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **6 - Pacific Coast Hwy & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	191	1,600	0.091	N-S(1):	0.583 *
	TH	4.00	1,351	6,400	0.211	N-S(2):	0.419
	LT	2.00	290	2,560	0.113 *	E-W(1):	0.188
Westbound	RT	1.00	311	1,600	0.138	E-W(2):	0.224 *
	TH	2.00	532	3,200	0.166 *		
	LT	2.00	191	2,560	0.075	V/C:	0.807
Northbound	RT	0.00	366	0	0.000	Lost Time:	0.100
	TH	4.00	2,639	6,400	0.470 *	ITS:	0.000
	LT	2.00	533	2,560	0.208		
Eastbound	RT	1.00	294	1,600	0.080	ICU:	0.907
	TH	2.00	360	3,200	0.113		
	LT	1.00	92	1,600	0.058 *	LOS:	E

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	109	1,600	0.002	N-S(1):	0.421
	TH	4.00	2,941	6,400	0.460 *	N-S(2):	0.599 *
	LT	2.00	325	2,560	0.127	E-W(1):	0.473 *
Westbound	RT	1.00	326	1,600	0.140	E-W(2):	0.272
	TH	2.00	440	3,200	0.138		
	LT	2.00	495	2,560	0.193 *	V/C:	1.072
Northbound	RT	0.00	258	0	0.000	Lost Time:	0.100
	TH	4.00	1,624	6,400	0.294	ITS:	0.000
	LT	2.00	355	2,560	0.139 *		
Eastbound	RT	1.00	559	1,600	0.280 *	ICU:	1.172
	TH	2.00	663	3,200	0.207		
	LT	1.00	211	1,600	0.132	LOS:	F

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **7 - Nash St & Imperial Hwy**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.03	424	1,656	0.256	N-S(1):	0.282 *
	TH	1.97	805	3,144	0.256 *	N-S(2):	0.000
	LT	1.00	383	1,600	0.239	E-W(1):	0.317 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.230
	TH	3.00	1,102	4,800	0.230		
	LT	2.00	322	2,560	0.126 *	V/C:	0.599
Northbound	RT	2.00	74	3,200	0.000	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	42	1,600	0.026 *		
Eastbound	RT	0.00	117	0	0.000	ICU:	0.699
	TH	3.00	800	4,800	0.191 *		
	LT	0.00	0	0	0.000	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.45	203	2,314	0.088	N-S(1):	0.156 *
	TH	1.55	218	2,486	0.088 *	N-S(2):	0.000
	LT	1.00	92	1,600	0.058	E-W(1):	0.318 *
Westbound	RT	0.00	0	0	0.000	E-W(2):	0.170
	TH	3.00	817	4,800	0.170		
	LT	2.00	29	2,560	0.011 *	V/C:	0.474
Northbound	RT	2.00	237	3,200	0.068 *	Lost Time:	0.100
	TH	0.00	0	0	0.000	ITS:	0.000
	LT	1.00	96	1,600	0.060		
Eastbound	RT	0.00	75	0	0.000	ICU:	0.574
	TH	3.00	1,397	4,800	0.307 *		
	LT	0.00	0	0	0.000	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **8 - Laiport St & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.28	25	449	0.043	N-S(1):	0.039
	TH	0.72	64	1,151	0.056 *	N-S(2):	0.087 *
	LT	1.00	5	1,600	0.003	E-W(1):	0.237 *
Westbound	RT	0.00	20	0	0.000	E-W(2):	0.101
	TH	2.00	227	3,200	0.077		
	LT	1.00	181	1,600	0.113 *	V/C:	0.324
Northbound	RT	2.00	58	3,200	0.000	Lost Time:	0.100
	TH	1.00	57	1,600	0.036	ITS:	0.000
	LT	1.00	49	1,600	0.031 *		
Eastbound	RT	0.00	185	0	0.000	ICU:	0.424
	TH	3.00	409	4,800	0.124 *		
	LT	1.00	39	1,600	0.024	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.40	42	634	0.060	N-S(1):	0.113
	TH	0.60	64	966	0.066 *	N-S(2):	0.149 *
	LT	1.00	34	1,600	0.021	E-W(1):	0.168 *
Westbound	RT	0.00	27	0	0.000	E-W(2):	0.157
	TH	2.00	435	3,200	0.144		
	LT	1.00	68	1,600	0.043 *	V/C:	0.317
Northbound	RT	2.00	244	3,200	0.055	Lost Time:	0.100
	TH	1.00	147	1,600	0.092	ITS:	0.000
	LT	1.00	132	1,600	0.083 *		
Eastbound	RT	0.00	67	0	0.000	ICU:	0.417
	TH	3.00	532	4,800	0.125 *		
	LT	1.00	21	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **9 - Nash St & Mariposa Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	200	0	0.000	N-S(1):	0.157
	TH	2.00	503	3,200	0.220 *	N-S(2):	0.238 *
	LT	1.00	69	1,600	0.043	E-W(1):	0.095
Westbound	RT	1.00	27	1,600	0.000	E-W(2):	0.126 *
	TH	2.00	226	3,200	0.071 *		
	LT	1.00	36	1,600	0.023	V/C:	0.364
Northbound	RT	0.00	62	0	0.000	Lost Time:	0.100
	TH	2.00	304	3,200	0.114	ITS:	0.000
	LT	1.00	29	1,600	0.018 *		
Eastbound	RT	1.00	44	1,600	0.018	ICU:	0.464
	TH	2.00	231	3,200	0.072		
	LT	1.00	88	1,600	0.055 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	91	0	0.000	N-S(1):	0.268 *
	TH	2.00	249	3,200	0.106	N-S(2):	0.130
	LT	1.00	72	1,600	0.045 *	E-W(1):	0.196
Westbound	RT	1.00	37	1,600	0.001	E-W(2):	0.227 *
	TH	2.00	276	3,200	0.086 *		
	LT	1.00	37	1,600	0.023	V/C:	0.495
Northbound	RT	0.00	154	0	0.000	Lost Time:	0.100
	TH	2.00	559	3,200	0.223 *	ITS:	0.000
	LT	1.00	39	1,600	0.024		
Eastbound	RT	1.00	55	1,600	0.022	ICU:	0.595
	TH	2.00	552	3,200	0.173		
	LT	1.00	226	1,600	0.141 *	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **10 - Kansas St & Grand Ave**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.054
	TH	1.00	29	1,600	0.047 *	N-S(2):	0.058 *
	LT	0.00	9	1,600	0.006	E-W(1):	0.161 *
Westbound	RT	0.00	9	0	0.000	E-W(2):	0.148
	TH	2.00	364	1,600	0.132		
	LT	0.00	49	1,600	0.031 *	V/C:	0.219
Northbound	RT	0.00	39	0	0.000	Lost Time:	0.100
	TH	1.00	19	1,600	0.048	ITS:	0.000
	LT	0.00	18	1,600	0.011 *		
Eastbound	RT	0.00	19	0	0.000	ICU:	0.319
	TH	2.00	371	1,600	0.130 *		
	LT	0.00	25	1,600	0.016	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	37	0	0.000	N-S(1):	0.080 *
	TH	1.00	17	1,600	0.039	N-S(2):	0.053
	LT	0.00	9	1,600	0.006 *	E-W(1):	0.188 *
Westbound	RT	0.00	11	0	0.000	E-W(2):	0.156
	TH	2.00	429	1,600	0.143		
	LT	0.00	19	1,600	0.012 *	V/C:	0.268
Northbound	RT	0.00	66	0	0.000	Lost Time:	0.100
	TH	1.00	31	1,600	0.074 *	ITS:	0.000
	LT	0.00	22	1,600	0.014		
Eastbound	RT	0.00	11	0	0.000	ICU:	0.368
	TH	2.00	532	1,600	0.176 *		
	LT	0.00	20	1,600	0.013	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **11 - Continental Blvd & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.20	40	1,925	0.000	N-S(1):	0.032 *
	TH	0.87	29	1,395	0.021	N-S(2):	0.000
	LT	1.92	64	2,464	0.026 *	E-W(1):	0.160
Westbound	RT	0.00	427	0	0.000	E-W(2):	0.417 *
	TH	3.00	1,366	4,800	0.374 *		
	LT	2.00	45	2,560	0.018	V/C:	0.449
Northbound	RT	1.00	5	1,600	0.000	Lost Time:	0.100
	TH	1.83	14	2,922	0.005	ITS:	0.000
	LT	1.17	9	1,503	0.006 *		
Eastbound	RT	1.00	51	1,600	0.029	ICU:	0.549
	TH	3.00	681	4,800	0.142		
	LT	2.00	111	2,560	0.043 *	LOS:	A

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.75	106	2,803	0.032	N-S(1):	0.201 *
	TH	0.25	15	397	0.038	N-S(2):	0.000
	LT	2.00	399	2,560	0.156 *	E-W(1):	0.289 *
Westbound	RT	0.00	91	0	0.000	E-W(2):	0.226
	TH	3.00	934	4,800	0.214		
	LT	2.00	33	2,560	0.013 *	V/C:	0.490
Northbound	RT	1.94	140	3,097	0.039	Lost Time:	0.100
	TH	1.06	77	1,703	0.045 *	ITS:	0.000
	LT	1.00	67	1,600	0.042		
Eastbound	RT	1.00	12	1,600	0.000	ICU:	0.590
	TH	3.00	1,327	4,800	0.276 *		
	LT	2.00	30	2,560	0.012	LOS:	A

* - Denotes critical movement

Project Title: **Pacific Coast Commons Project**
Intersection: **12 - Nash St & El Segundo Blvd**
Description: **Future + Project (Revised Analysis)**

Thru Lane:	1600 vph	N-S Split Phase :	Y
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3
OLA Movements :			
FF Movements:			

Date/Time: **AM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	34	1,600	0.007	N-S(1):	0.064 *
	TH	1.09	76	1,745	0.044	N-S(2):	0.000
	LT	1.91	133	2,444	0.054 *	E-W(1):	0.269
Westbound	RT	0.00	352	0	0.000	E-W(2):	0.476 *
	TH	3.00	1,795	4,800	0.447 *		
	LT	2.00	336	2,560	0.131	V/C:	0.540
Northbound	RT	1.00	11	1,600	0.000	Lost Time:	0.100
	TH	1.00	16	1,600	0.010 *	ITS:	0.000
	LT	2.00	8	2,560	0.003		
Eastbound	RT	1.00	36	1,600	0.021	ICU:	0.640
	TH	3.00	664	4,800	0.138		
	LT	2.00	74	2,560	0.029 *	LOS:	B

Date/Time: **PM PEAK HOUR**

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	1.00	66	1,600	0.030	N-S(1):	0.214 *
	TH	1.00	13	1,600	0.008	N-S(2):	0.000
	LT	2.00	377	2,560	0.147 *	E-W(1):	0.391 *
Westbound	RT	0.00	153	0	0.000	E-W(2):	0.249
	TH	3.00	935	4,800	0.227		
	LT	2.00	31	2,560	0.012 *	V/C:	0.605
Northbound	RT	1.44	154	2,303	0.061	Lost Time:	0.100
	TH	0.56	60	897	0.067 *	ITS:	0.000
	LT	2.00	35	2,560	0.014		
Eastbound	RT	1.00	22	1,600	0.007	ICU:	0.705
	TH	3.00	1,820	4,800	0.379 *		
	LT	2.00	57	2,560	0.022	LOS:	C

* - Denotes critical movement

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	19	3	1899	2264	25
Future Vol, veh/h	13	19	3	1899	2264	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	21	3	2064	2461	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3307	1244	2488	0	-	0
Stage 1	2475	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	17	142	70	-	-	-
Stage 1	28	-	-	-	-	-
Stage 2	351	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	16	142	70	-	-	-
Mov Cap-2 Maneuver	16	-	-	-	-	-
Stage 1	27	-	-	-	-	-
Stage 2	351	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 336.9	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	70	-	34	-	-
HCM Lane V/C Ratio	0.047	-	1.023	-	-
HCM Control Delay (s)	58.9	-	$ 336.9	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	3.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	33	4	0	0	5	1806	59	22	1924	118
Future Vol, veh/h	0	0	33	4	0	0	5	1806	59	22	1924	118
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	36	4	0	0	5	1963	64	24	2091	128

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1110	2889	4272	1014	2219	0	0	2027	0	0
Stage 1	-	-	-	2005	2005	-	-	-	-	-	-	-
Stage 2	-	-	-	884	2267	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	175	17	2	203	97	-	-	121	-	-
Stage 1	0	0	-	38	103	-	-	-	-	-	-	-
Stage 2	0	0	-	278	75	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	175	11	2	203	97	-	-	121	-	-
Mov Cap-2 Maneuver	-	-	-	11	2	-	-	-	-	-	-	-
Stage 1	-	-	-	36	98	-	-	-	-	-	-	-
Stage 2	-	-	-	177	60	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.8	$ 473.2	0.1	0.4
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	97	-	-	175	11	-	121	-	-
HCM Lane V/C Ratio	0.056	-	-	0.205	0.395	-	0.198	-	-
HCM Control Delay (s)	44.3	-	-	30.8	$ 473.2	0	41.9	-	-
HCM Lane LOS	E	-	-	D	F	A	E	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.9	-	0.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	21	6	2289	2337	52
Future Vol, veh/h	6	21	6	2289	2337	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	130	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	23	7	2488	2540	57

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3578	1299	2597	0	-	0
Stage 1	2569	-	-	-	-	-
Stage 2	1009	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	12	131	62	-	-	-
Stage 1	24	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	11	131	62	-	-	-
Mov Cap-2 Maneuver	11	-	-	-	-	-
Stage 1	21	-	-	-	-	-
Stage 2	282	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	237.1	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	62	-	38	-	-
HCM Lane V/C Ratio	0.105	-	0.772	-	-
HCM Control Delay (s)	69.8	-	237.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	2.8	-	-

Intersection	
Int Delay, s/veh	12.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	57	16	0	10	7	2102	74	16	2218	68
Future Vol, veh/h	0	0	57	16	0	10	7	2102	74	16	2218	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	55	-	0	70	-	-	155	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	62	17	0	11	8	2285	80	17	2411	74

Major/Minor	Minor2		Minor1			Major1				Major2		
Conflicting Flow All	-	-	1243	3339	4860	1183	2485	0	0	2365	0	0
Stage 1	-	-	-	2341	2341	-	-	-	-	-	-	-
Stage 2	-	-	-	998	2519	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	142	~ 9	1	156	70	-	-	81	-	-
Stage 1	0	0	-	22	69	-	-	-	-	-	-	-
Stage 2	0	0	-	236	56	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	142	~ 4	1	156	70	-	-	81	-	-
Mov Cap-2 Maneuver	-	-	-	~ 4	1	-	-	-	-	-	-	-
Stage 1	-	-	-	19	61	-	-	-	-	-	-	-
Stage 2	-	-	-	105	44	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	48.7	$ 1970.9	0.2	0.4
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	70	-	-	142	4	156	81	-	-
HCM Lane V/C Ratio	0.109	-	-	0.436	4.348	0.07	0.215	-	-
HCM Control Delay (s)	62.6	-	-	48.3	$ 3184.1	29.8	61.2	-	-
HCM Lane LOS	F	-	-	E	F	D	F	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.9	3.5	0.2	0.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	315	9	38	228	2	8	2	85	26	0	0
Future Vol, veh/h	0	315	9	38	228	2	8	2	85	26	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	342	10	41	248	2	9	2	92	28	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	250	0	0	352	0	0	678	679	347
Stage 1	-	-	-	-	-	-	347	347	-
Stage 2	-	-	-	-	-	-	331	332	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1316	-	-	1207	-	-	418	374	696
Stage 1	-	-	-	-	-	-	716	635	-
Stage 2	-	-	-	-	-	-	728	644	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1316	-	-	1207	-	-	402	0	696
Mov Cap-2 Maneuver	-	-	-	-	-	-	402	0	-
Stage 1	-	-	-	-	-	-	688	0	-
Stage 2	-	-	-	-	-	-	728	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	655	1316	-	-	1207	-	-
HCM Lane V/C Ratio	0.158	-	-	-	0.034	-	-
HCM Control Delay (s)	11.5	0	-	-	8.1	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	12	10	21	38	18	8	36	5	16	34	10
Future Vol, veh/h	8	12	10	21	38	18	8	36	5	16	34	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	13	11	23	41	20	9	39	5	17	37	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.3	7.6	7.5	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	27%	27%	27%
Vol Thru, %	73%	40%	49%	57%
Vol Right, %	10%	33%	23%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	30	77	60
LT Vol	8	8	21	16
Through Vol	36	12	38	34
RT Vol	5	10	18	10
Lane Flow Rate	53	33	84	65
Geometry Grp	1	1	1	1
Degree of Util (X)	0.062	0.037	0.095	0.075
Departure Headway (Hd)	4.157	4.056	4.078	4.129
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	871	870	858
Service Time	2.229	2.137	2.147	2.199
HCM Lane V/C Ratio	0.062	0.038	0.097	0.076
HCM Control Delay	7.5	7.3	7.6	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕				
Traffic Vol, veh/h	0	346	7	48	414	7	17	2	104	20	0	0
Future Vol, veh/h	0	346	7	48	414	7	17	2	104	20	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	16965	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	376	8	52	450	8	18	2	113	22	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	458	0	0	384	0	0	938	942	380
Stage 1	-	-	-	-	-	-	380	380	-
Stage 2	-	-	-	-	-	-	558	562	-
Critical Hdwy	4.12	-	-	4.12	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1103	-	-	1174	-	-	293	263	667
Stage 1	-	-	-	-	-	-	691	614	-
Stage 2	-	-	-	-	-	-	573	510	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1103	-	-	1174	-	-	276	0	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	276	0	-
Stage 1	-	-	-	-	-	-	650	0	-
Stage 2	-	-	-	-	-	-	573	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	556	1103	-	-	1174	-	-
HCM Lane V/C Ratio	0.24	-	-	-	0.044	-	-
HCM Control Delay (s)	13.5	0	-	-	8.2	0	-
HCM Lane LOS	B	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.9	0	-	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	14	8	33	21	23	16	68	8	20	31	7
Future Vol, veh/h	4	14	8	33	21	23	16	68	8	20	31	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	15	9	36	23	25	17	74	9	22	34	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.4	7.7	7.8	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	15%	43%	34%
Vol Thru, %	74%	54%	27%	53%
Vol Right, %	9%	31%	30%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	92	26	77	58
LT Vol	16	4	33	20
Through Vol	68	14	21	31
RT Vol	8	8	23	7
Lane Flow Rate	100	28	84	63
Geometry Grp	1	1	1	1
Degree of Util (X)	0.116	0.033	0.096	0.074
Departure Headway (Hd)	4.159	4.235	4.144	4.201
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	852	850	851	841
Service Time	2.233	2.235	2.237	2.285
HCM Lane V/C Ratio	0.117	0.033	0.099	0.075
HCM Control Delay	7.8	7.4	7.7	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	21	0	0	2013	26
Future Vol, veh/h	0	21	0	0	2013	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	0	0	2188	28

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	1108		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.14		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.92		-	-
Pot Cap-1 Maneuver	0	176		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	176		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	28.5	0
HCM LOS	D	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	176	-	-
HCM Lane V/C Ratio	0.13	-	-
HCM Control Delay (s)	28.5	-	-
HCM Lane LOS	D	-	-
HCM 95th %tile Q(veh)	0.4	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	23	0	0	2253	32
Future Vol, veh/h	0	23	0	0	2253	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	25	0	0	2449	35

Major/Minor	Minor2			Major2	
Conflicting Flow All	-	1242		-	0
Stage 1	-	-		-	-
Stage 2	-	-		-	-
Critical Hdwy	-	7.14		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	-	-		-	-
Follow-up Hdwy	-	3.92		-	-
Pot Cap-1 Maneuver	0	143		-	-
Stage 1	0	-		-	-
Stage 2	0	-		-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	143		-	-
Mov Cap-2 Maneuver	-	-		-	-
Stage 1	-	-		-	-
Stage 2	-	-		-	-

Approach	EB	SB
HCM Control Delay, s	35.4	0
HCM LOS	E	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	143	-	-
HCM Lane V/C Ratio	0.175	-	-
HCM Control Delay (s)	35.4	-	-
HCM Lane LOS	E	-	-
HCM 95th %tile Q(veh)	0.6	-	-

ATTACHMENT B

Signal Warrant Analysis Worksheets

FEHR PEERS

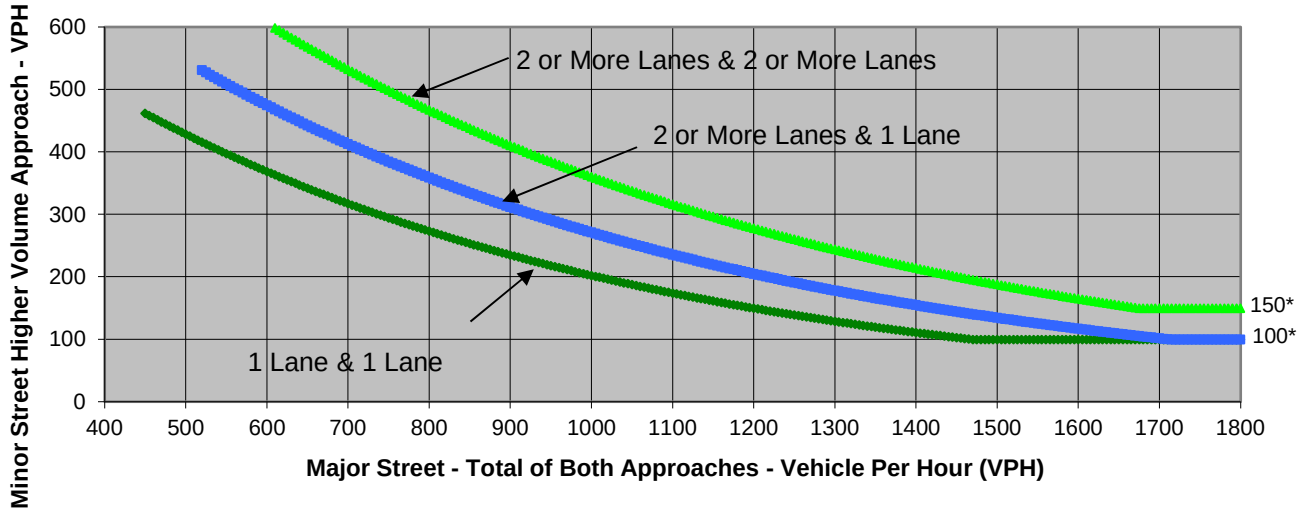
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	2	0	12	0
Through	2,386	2,826	0	0
Right	0	18	17	0
Total	2,388	2,844	29	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,232**	**29**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

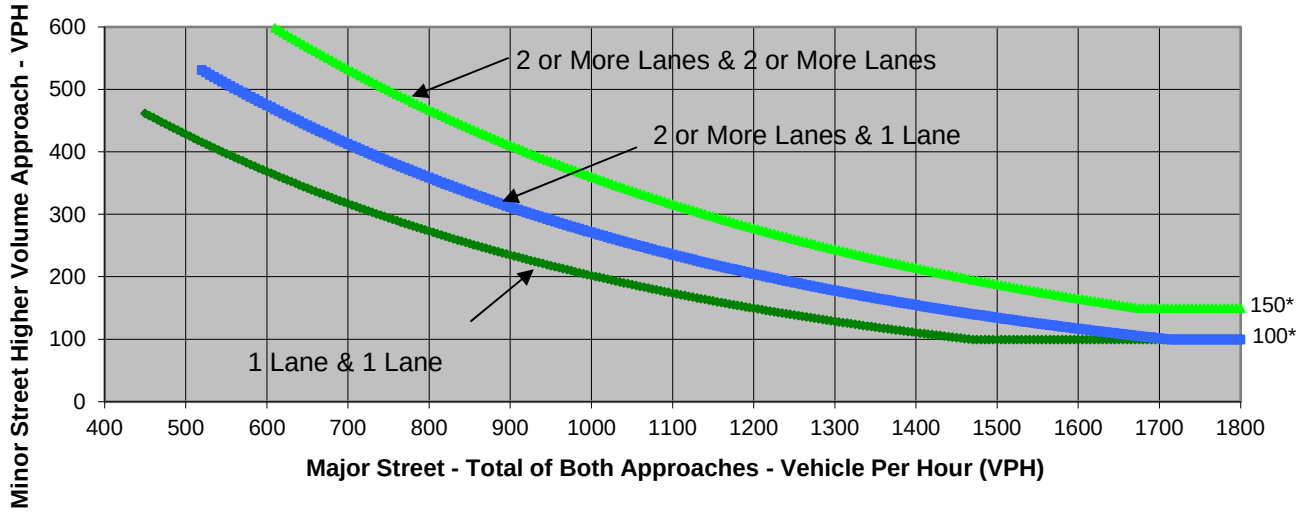
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	3	0	5	0
Through	2,814	2,960	0	0
Right	0	28	21	0
Total	2,817	2,988	26	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,805**	**26**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

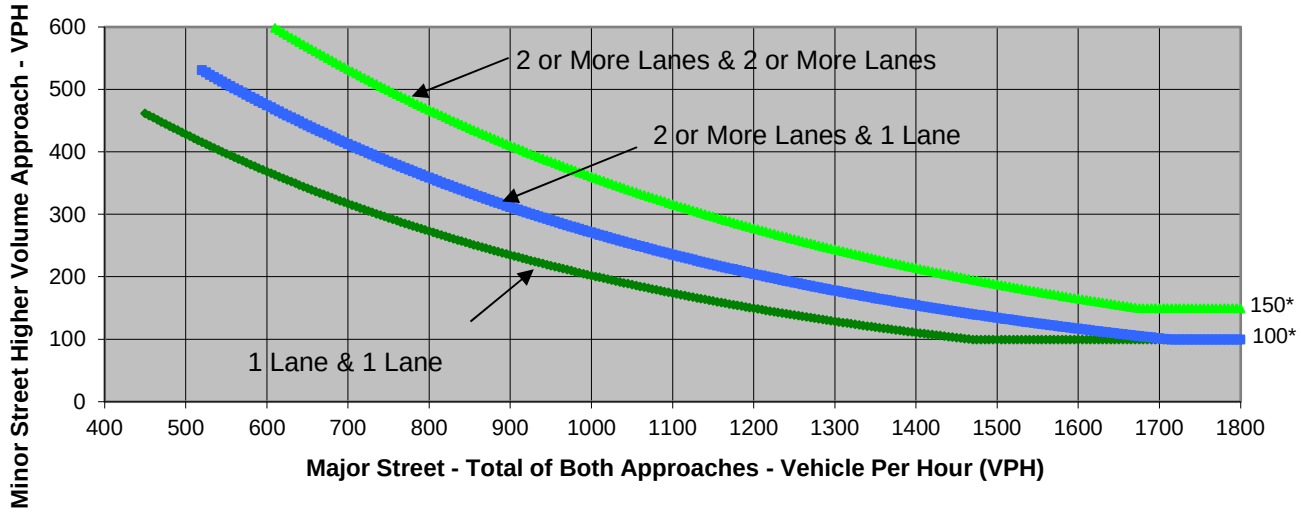
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future + Project Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	3	0	13	0
Through	2,435	2,847	0	0
Right	0	25	19	0
Total	2,438	2,872	32	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,310**	**32**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

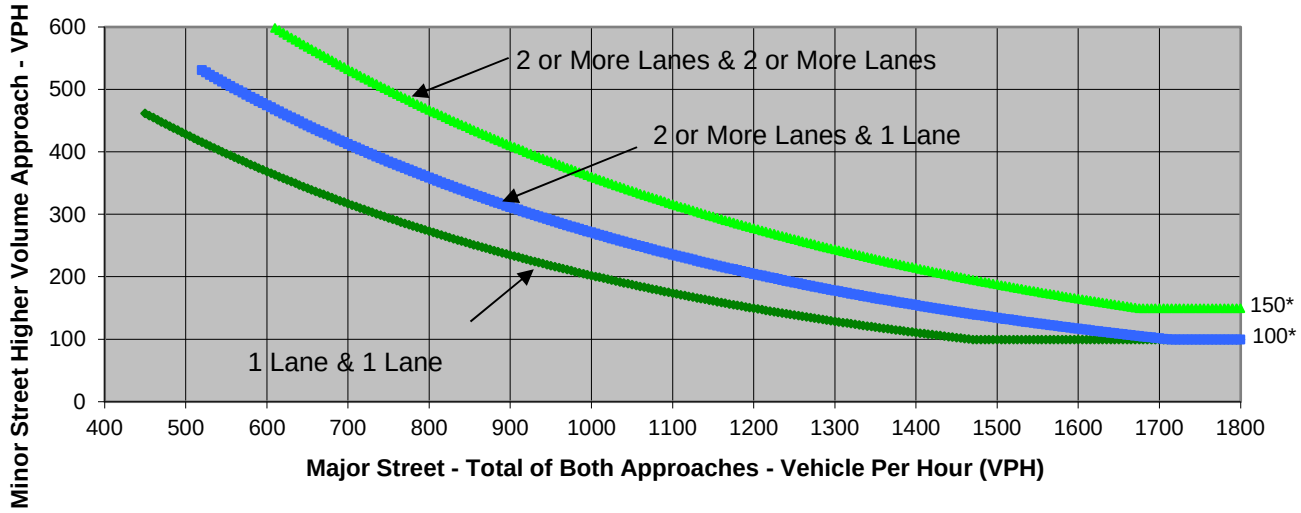
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Palm Ave	Scenario	Future + Project Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	6	0	6	0
Through	2,858	2,997	0	0
Right	0	52	21	0
Total	2,864	3,049	27	0

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Palm Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,913**	**27**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

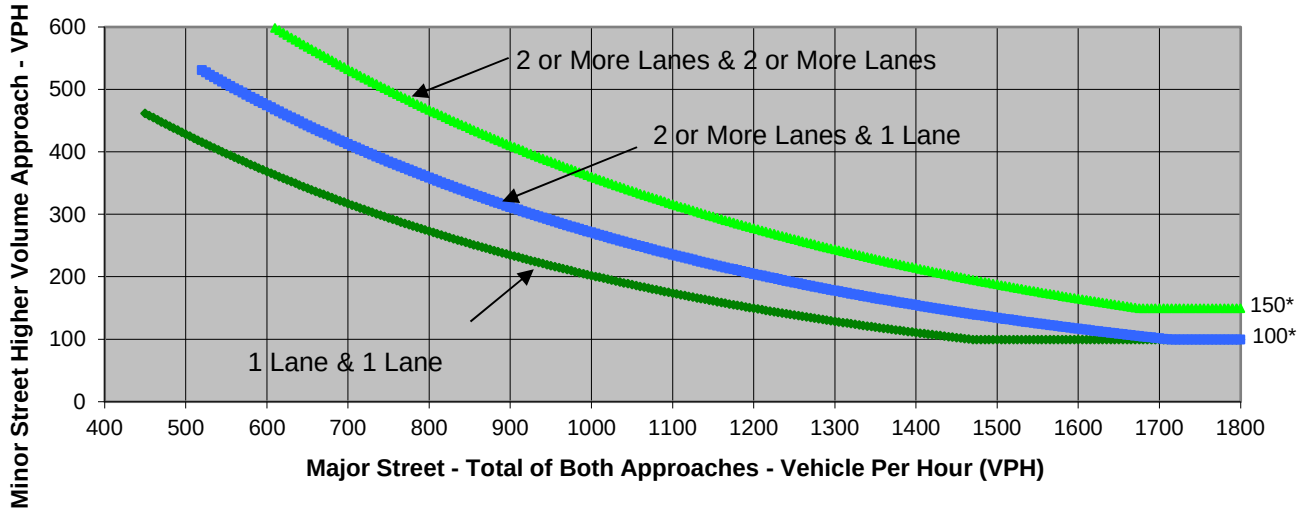
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Holly Ave	Scenario	Future Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	4	22	0	4
Through	2,284	2,365	0	0
Right	59	118	30	0
Total	2,347	2,505	30	4

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**4,852**	**30**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

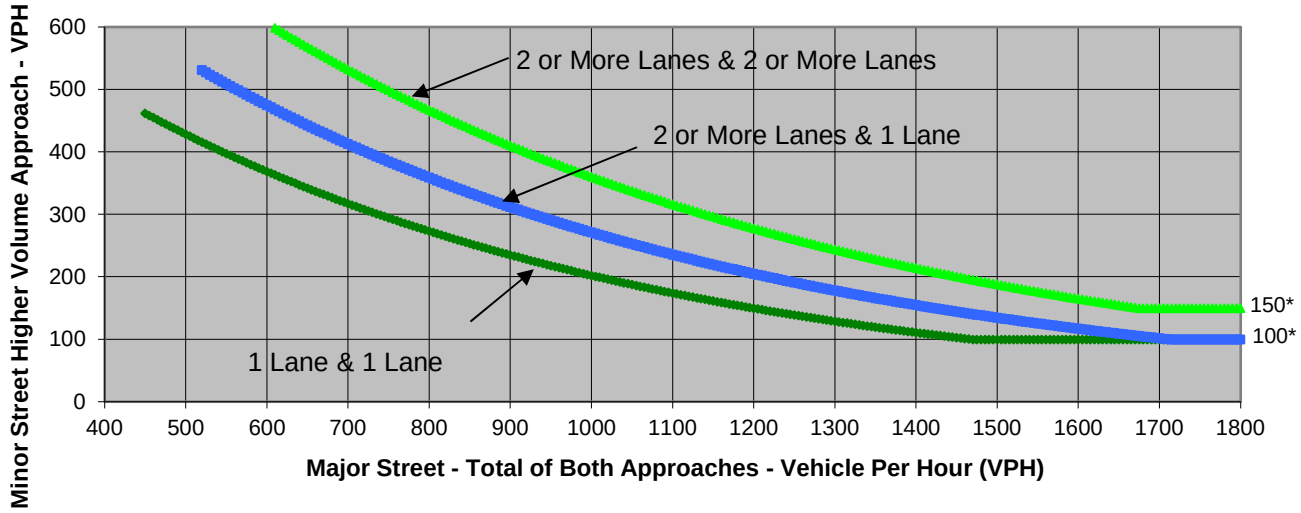
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Holly Ave	Scenario	Future Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	5	16	0	16
Through	2,570	2,796	0	0
Right	74	68	51	10
Total	2,649	2,880	51	26

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,529**	**51**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

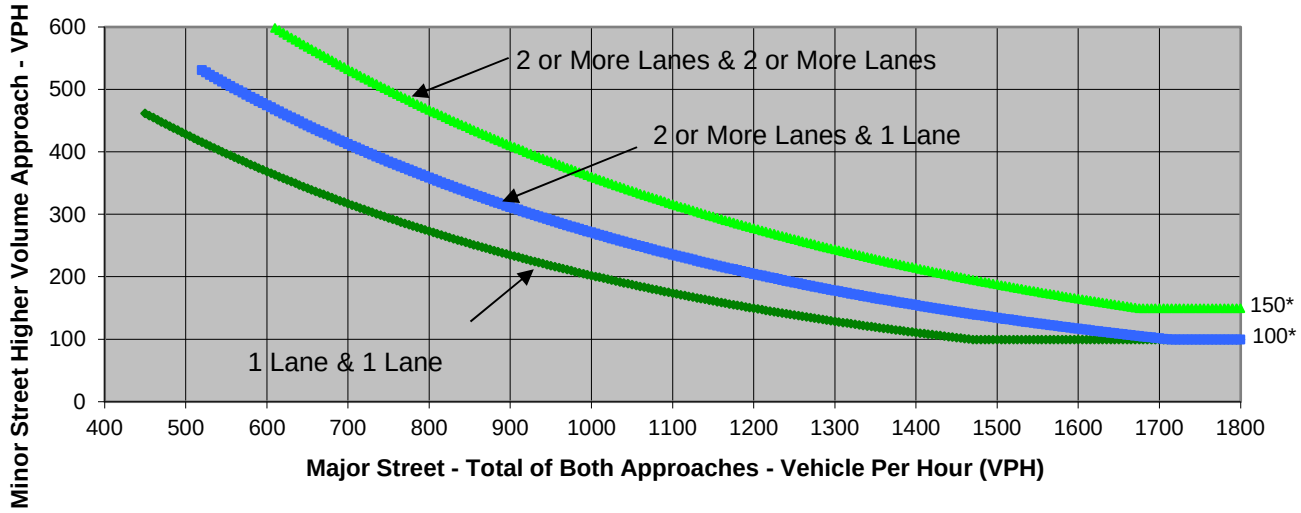
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Holly Ave	Scenario	Future + Project Conditions
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	5	22	0	4
Through	2,310	2,397	0	0
Right	59	118	33	0
Total	2,374	2,537	33	4

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**4,911**	**33**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

FEHR PEERS

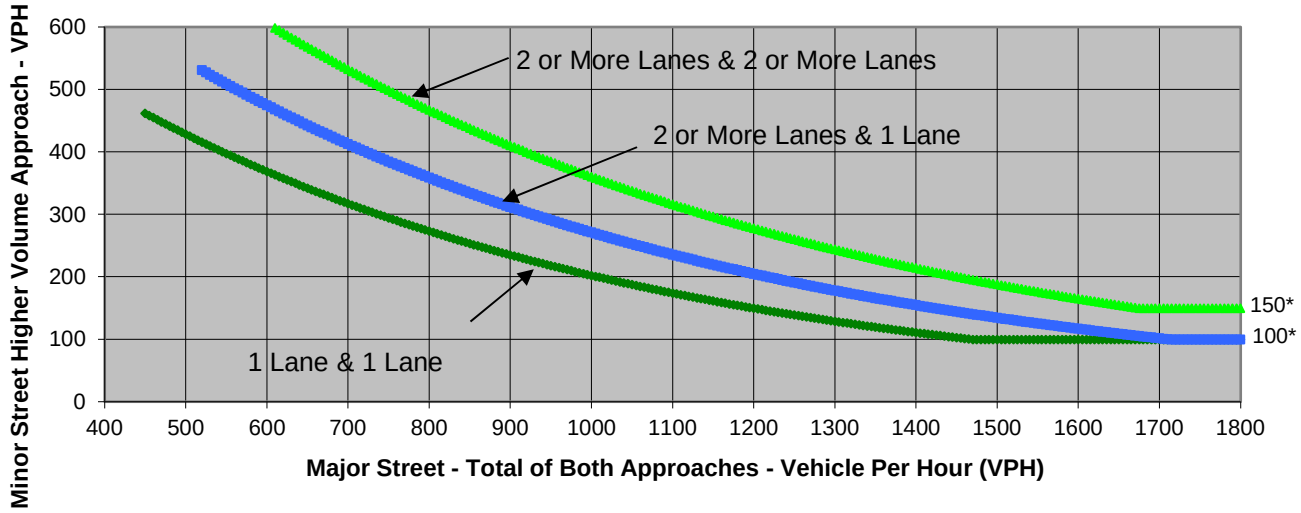
Major Street	Pacific Coast Highway	Project	Pacific Coast Commons
Minor Street	Holly Ave	Scenario	Future + Project Conditions
		Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	7	16	0	16
Through	2,611	2,827	0	0
Right	74	68	57	10
Total	2,692	2,911	57	26

Major Street Direction

X	North/South
	East/West



* Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Pacific Coast Highway	Holly Ave	
Number of Approach Lanes	**5**	**1**	**NO**
Traffic Volume (VPH) *	**5,603**	**57**	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.