FINAL | SEPTEMBER 2023



# Victoria Boulevard Apartments

## ENVIRONMENTAL IMPACT REPORT

Prepared for

**City of Dana Point**

Prepared by

Michael Baker INTERNATIONAL

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# FINAL
# ENVIRONMENTAL IMPACT REPORT

# Victoria Boulevard Apartments

**SCH NO. 2021070304**

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# 1.0 Introduction

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# 1.0 INTRODUCTION

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the City of Dana Point, as the lead agency, has evaluated the comments received on the *Victoria Boulevard Apartments Draft Environmental Impact Report* (Draft EIR).

The Draft EIR for the proposed Victoria Boulevard Apartments (herein referenced as the project) was distributed to potential responsible and trustee agencies, interested groups, and organizations. The Draft EIR was made available for public review and comment for a period of 45 days. The public review period for the Draft EIR established by the CEQA Guidelines commenced on January 20, 2023 and ended on March 6, 2023. It is acknowledged that late letters were accepted through March 9, 2023.

The Final EIR consists of the following components:

- Section 1.0 – Introduction;
- Section 2.0 – Revisions to Information Presented in the Draft EIR
- Section 3.0 – Response to Comments;
- Section 4.0 – Errata; and
- Section 5.0 – Mitigation Monitoring and Reporting Program.

Due to its length, the text of the Draft EIR is not included with this document; however, it is included by reference in this Final EIR. None of the corrections or clarifications to the Draft EIR identified in this document constitutes "significant new information" pursuant to CEQA Guidelines Section 15088.5. As a result, a recirculation of the Draft EIR is not required.

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# 2.0 Revisions to Information Presented in the Draft EIR

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# 2.0 REVISIONS TO INFORMATION PRESENTED IN THE DRAFT EIR

## 2.1 INTRODUCTION

On January 20, 2023, the City of Dana Point circulated the Draft Environmental Impact Report (EIR) for a 45-day public review period from January 20, 2023 and ending on March 6, 2023 to responsible and trustee agencies, interested parties, and the general public. Since this circulation, the Applicant has proposed minor modifications to the project. As such, potential impacts resulting from the modifications to the previously analyzed project are discussed herein. As presented within this section, these revisions represent modifications to the previously analyzed project description. Based on the analysis presented below, these revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

## 2.2 MODIFICATIONS TO THE PREVIOUSLY ANALYZED PROJECT

Table 2-1, *Modifications to the Previously Analyzed Project*, details the proposed modifications to the previously analyzed project in the Draft EIR.

**Table 2-1**
**Modifications to the Previously Analyzed Project**

| Project Component | Previously Analyzed Project | Revised Project |
|---|---|---|
| Dwelling Units | 349 dwelling units<br>Including 53 affordable units | 306 dwelling units<br>Including 46 affordable units |
| Density | 63.3 dwelling units per acre | 55.5 dwelling units per acre |
| Floor Area Ratio (FAR) | 1.8 FAR | 1.6 FAR |
| Open Space | 144,018 square feet | 141,540 square feet |
| Public Open Space | 1.10 acre | 1.065 acre |
| Private Passive Open Space | 18,256 square feet | 15,778 square feet |
| Maximum Building Floors[1] | North Elevation<br>(Victoria Boulevard): three to five floors;<br>East Elevation (Pacific Coast Highway [PCH]): three to five floors;<br>South Elevation (PCH): five floors; and<br>West Elevation<br>(Sepulveda Avenue): three to five floors. | North Elevation<br>(Victoria Boulevard): two to four floors;<br>East Elevation (PCH): two to five floors;<br>South Elevation (PCH): four to five floors; and<br>West Elevation<br>(Sepulveda Avenue): two to five floors. |
| Parking Structure Spaces | Required: 669 spaces<br>Provided: 681 spaces | Required: 586 spaces<br>Provided: 586 spaces |

Notes:
[1] It is acknowledged that although the building heights, particularly along Victoria Boulevard, have changed, the overall permitted building heights remains the same as that considered in the Draft EIR. The project proposes up to 65 feet in height, and is permitted to construct up to 75 feet in height with an additional 10 feet for appurtenances.

As shown in Table 2-1, the dwelling unit total was reduced by 43 dwelling units from 349 to 306 dwelling units. The reduction is a result of reducing the maximum number of floors permitted for the building. Specifically, the maximum number of building floors were reduced to range between two to four floors along the northern elevation (along Victoria Boulevard); two to five floors along the eastern elevation (along PCH); four to five floors along the southern elevation (along PCH); and two to five floors along the western elevation (along Sepulveda Avenue). Consequently, both the building's density and FAR have been reduced by 7.8 dwelling units per acre and 0.2 FAR, respectively. Further, the revised project involves reducing the private passive open space square footage by reducing the total number of private patios available. Additionally, the public open space acreage would be slightly reduced from 1.10 acre to 1.065 acre. Overall, the open space square footage would be reduced from 144,018 square feet to 141,540 square feet.

The revised project also involves reducing the number of parking spaces available (by 95 spaces) to reflect the updated parking requirements. Based on the City's parking requirements for the proposed project, the revised project would be required to provide 586 parking spaces. As shown in Table 2-1, the revised project would eliminate 95 parking spaces compared to the project analyzed in the Draft EIR for a total of 586 spaces.

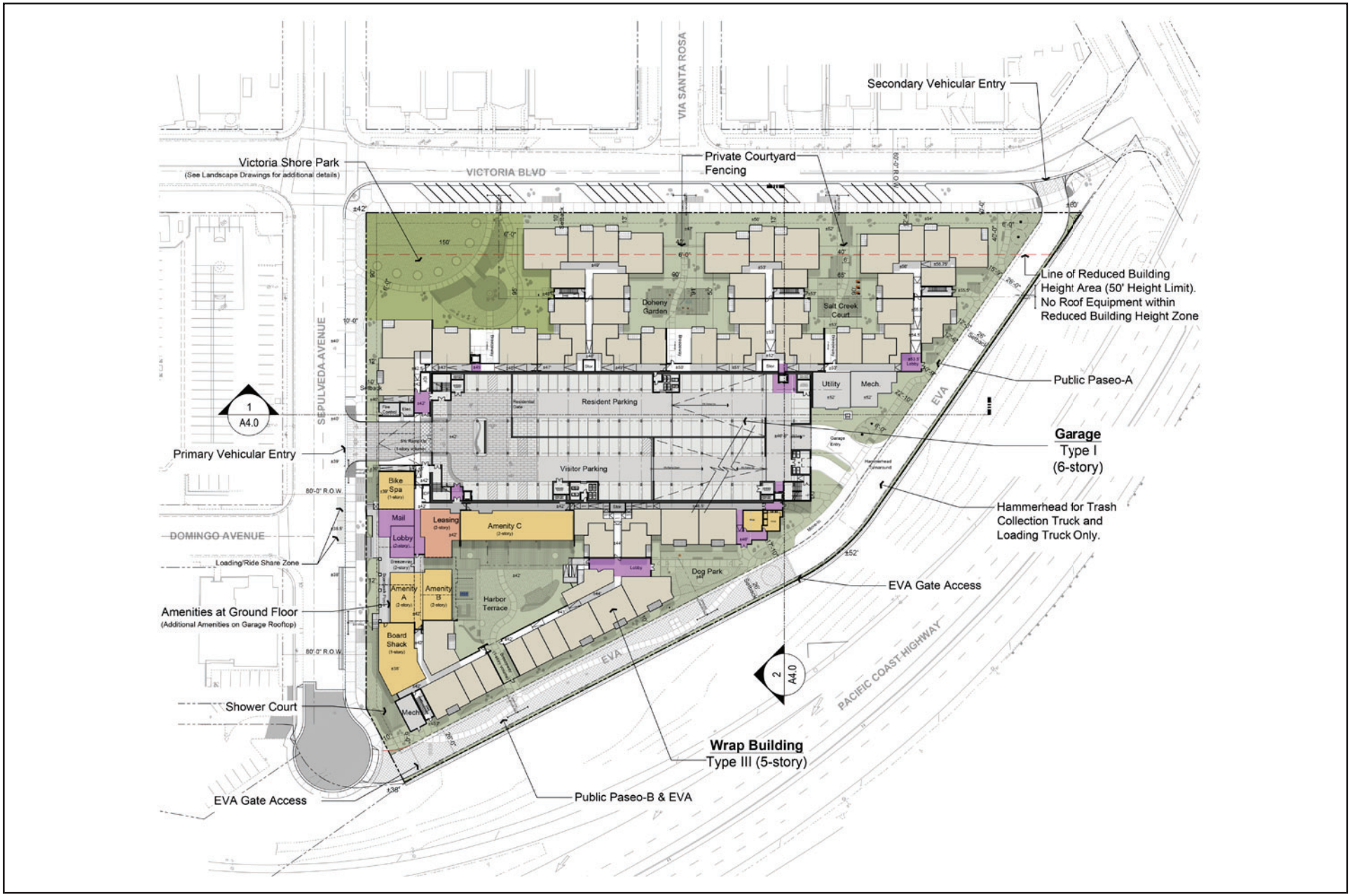
The following Draft EIR exhibits were also updated to reflect the revised project.

- Exhibit 3-5 Conceptual Site Plan
- Exhibit 3-6 Conceptual Landscape Plan

## IMPACTS RESULTING FROM MODIFICATIONS TO THE PROJECT

Potential environmental impacts resulting from the proposed modifications are presented below. Overall, the proposed modifications would result in no new significant impacts, would not increase in severity any environmental impacts of the project, and would not require any new mitigation measures, not previously analyzed in the Draft EIR. The revisions to the project do not substantially or fundamentally alter the conclusions or findings of the Draft EIR relative to the project's potential environmental effects or proposed mitigation measures. Therefore, in accordance with the standards set forth in CEQA Guidelines Section 15088.5, no recirculation of the EIR is required.

Implementation of these project modifications would not result in any new improvements outside of the project site analyzed in the Draft EIR. Construction activities (e.g., demolition, grading, and building) and operational activities (e.g., restaurant operations deliveries, and landscaping maintenance) under the revised project would be similar, or reduced, compared to the previously analyzed project. As such, the previously analyzed project impacts to the following environmental topical areas would not change as a result of the project modifications:




Source: ktgy Architecture • Planning, June 2023

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# Conceptual Site Plan

**Exhibit 3-5**




Source: ktgy Architecture • Planning, July 2023

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# Conceptual Landscape Plan

**Exhibit 3-6**

- Aesthetics;
- Agriculture and Forestry Resources;
- Biological Resources;
- Cultural Resources;
- Energy;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Population and Housing;
- Public Services;
- Recreation;
- Utilities and Service Systems;
- Transportation/Traffic;
- Tribal Cultural Resources; and
- Wildfire.

## 2.3 IMPACTS RESULTING FROM MODIFICATIONS TO THE PROJECT

Potential environmental impacts resulting from the proposed modifications to the previously analyzed project are presented below for each environmental topic or consideration presented in the Draft EIR.

### LAND USE AND RELEVANT PLANNING

Based on the Draft EIR analysis, implementation of the previously analyzed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, including the *City of Dana Point General Plan*, *Dana Point Municipal Code* (Municipal Code), *Dana Point Local Coastal Program*, and the Southern California Association of Governments' *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments – Connect SoCal* (2020-2045 RTP/SCS). Additionally, the modified project components would not result in any new or different land use changes or discretionary approvals. As such, the revised project would not result in any new potentially adverse land use impacts not previously considered and analyzed in the Draft EIR.

### AESTHETICS

The Draft EIR determined that the previously analyzed project would not have a substantial adverse effect on a scenic vista, substantially damage scenic resources within a State Scenic Highway, conflict with applicable zoning or other regulations governing scenic quality, or create a new source of substantial light or glare. Specifically, the Draft EIR determined that although the previously analyzed project would modify the visible massing on-site, project implementation would not result in substantial view blockage of scenic resources (the Pacific Ocean) as experienced from scenic corridors (motorists traveling along southbound Interstate 5 (I-5) travel lanes and the southbound I-5 off-ramp to northbound PCH travel lanes). Additionally, it was determined that the previously analyzed project would be consistent with applicable General Plan Urban Design Element policies governing scenic quality. Further, the previously analyzed project would comply with the *Victoria Boulevard Specific Plan* (Specific Plan) Design Guidelines and Development Standards, including maximum building height restrictions, the preservation of PCH's function as a visual corridor with views to attractive and existing urban scenes and would not conflict with its role as a "type three" urbanscape corridor or State scenic highway. The previously analyzed project would also be consistent with applicable zoning and regulations related to scenic quality. Further, project implementation would be subject to the Specific Plan Design Guidelines and Development

Standards (e.g., lot size, setback, density, open space, and landscaping requirements). Overall, these standards would serve to improve the scenic quality within the project site. Last, the previously analyzed project's short-term and long-term impacts to lighting and glare would be reduced to less than significant levels following conformance with Municipal Code Section 11.10.014, *Special Provisions*, and Municipal Code Section 9.05.220, *Lighting*.

The revised project anticipates the building's siting, architectural design, and building materials would remain the same. However, the decreased maximum number of floors permitted for the building would reduce the visible massing on-site, compared to the previously analyzed project, and thus would further reduce potential impacts associated with view blockage of scenic resources (the Pacific Ocean) as experienced from scenic corridors (motorists traveling along southbound I-5 travel lanes and the southbound I-5 off-ramp to northbound PCH travel lanes). Similar to the previously analyzed project, the revised project would be consistent with applicable General Plan Urban Design Element policies governing scenic quality and Specific Plan Design Guidelines and Development Standards, including maximum building height restrictions, the preservation of PCH's function as a visual corridor with views to attractive and existing urban scenes and would not conflict with its role as a "type three" urbanscape corridor or State scenic highway. Further, the revised project would be consistent with applicable zoning and regulations related to scenic quality. Similar to the previously analyzed project, the revised project would be subject to the Specific Plan Design Guidelines and Development Standards (e.g., lot size, setback, density, open space, and landscaping requirements); however, the revised project would further improve the scenic quality of the site through a reduction of 0.2 FAR, a decrease of 7.8 dwelling units per acre, and a slight decrease in public open space acreage from 1.10 acre to 1.065 acre. Conformance with Municipal Code Sections 11.10.014 and 9.05.220 would ensure the revised project's short-term and long-term impacts to lighting and glare would not exceed those of the previously analyzed project. Overall, the revised project would not create any new substantial impacts related to aesthetics and light/glare that were not previously considered and addressed in the Draft EIR. Rather, aesthetics and light/glare impacts would be further reduced from those analyzed in the Draft EIR.

## TRIBAL AND CULTURAL RESOURCES

The Draft EIR concluded that development of the previously analyzed project would not adversely impact unknown tribal cultural resources in the project area upon implementation of Mitigation Measure CUL-1. Specifically, if tribal cultural resources are encountered during project construction, Mitigation Measure CUL-1 would require all project construction efforts to halt until an archaeologist examines the site, identifies the archaeological significance of the find, and recommends a course of action which must be implemented. The proposed modifications to the project would not alter ground-disturbing activities, development footprint, or project location and thus, impacts to unknown tribal cultural resources on-site would remain the same as that analyzed in the Draft EIR. Similar to the previously analyzed project, compliance with Mitigation Measure CUL-1 would ensure construction and operational activities under the revised project do not result in substantial adverse impacts in regard to tribal and cultural resources. Overall, the revised project would not result in any new potentially adverse tribal cultural resources impacts not previously considered and analyzed in the Draft EIR.

## GEOLOGY AND SOILS

The Draft EIR determined that the previously analyzed project would result in less than significant impacts related to geologic and seismic hazards following conformance with established regulatory

requirements, including the California Building Code (CBC), Municipal Code, National Pollutant Discharge Elimination System (NPDES) requirements, and South Coast Air Quality Management District (SCAQMD) Rule 403. Additionally, impacts to unknown paleontological resources would be reduced to less than significant levels with implementation of Mitigation Measure GEO-1. Mitigation Measure GEO-1 would ensure a site-specific paleontological assessment is prepared to reduce potential impacts to unknown paleontological resources on-site. No changes to grading quantities or depths or the project's development footprint are proposed. Similar to the previously analyzed project, compliance with established regulatory requirements, including the CBC, Municipal Code, NPDES requirements, SCAQMD Rule 403, and Mitigation Measure GEO-1 would ensure construction and operational activities under the revised project do not result in substantial adverse impacts in regard to geology and soils. Overall, the revised project would not result in any new potentially adverse impacts associated with geology and soils compared to that previously considered and addressed in the Draft EIR.

## HYDROLOGY AND WATER QUALITY

The Draft EIR concluded that the previously analyzed project would result in less than significant impacts related to hydrology and water quality following conformance with all applicable Federal, State, and local stormwater regulations and requirements, including the Municipal Code and NPDES and municipal separate storm sewer (drain) systems (MS4) permit requirements. The proposed reductions to the maximum building floors, dwelling units, density, FAR, and parking structure spaces, and increases in public and private open spaces would not result in any new potentially adverse impacts regarding water quality and waste discharge requirements, groundwater supplies and recharge, drainage pattern alterations, or flooding. Rather, the revised project's increased public open space would allow for increased infiltration on-site. Similar to the previously analyzed project, the revised project would also be required to prepare and implement a Stormwater Pollution Prevention Plan and associated construction and operational best management practices to minimize impacts related to water quality and hydrology. Therefore, the revised project would not result in any new potentially adverse hydrology and water quality impacts not previously addressed in the Draft EIR.

## HAZARDS AND HAZARDOUS MATERIALS

The Draft EIR concluded that the previously analyzed project's impacts related to hazards and hazardous materials would be reduced to less than significant levels following compliance with Mitigation Measures HAZ-1 through HAZ-7 and existing laws and regulations established by the Orange County Health Care Agency (OCHCA), San Diego Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), U.S. Department of Transportation (DOT), California Department of Transportation (Caltrans), and California Division of Occupational Safety and Health (Cal/OSHA), among others. The proposed modifications would not change the project's use of hazardous materials. Similar to the previously analyzed project, the revised project's additional public open space acreage would involve the occasional use of pesticides and herbicides for landscape maintenance of the project site. However, such uses are common for residential uses and would not be stored in substantial quantities which are required to be reported to a regulatory agency. Further, similar to the previously analyzed project, compliance with Mitigation Measures HAZ-1 through HAZ-7 and existing laws and regulations established by OCHCA, San Diego RWQCB, DTSC, DOT, Caltrans, and Cal/OSHA, would ensure construction and operational activities under the revised project do not result in substantial adverse impacts in regard to hazards and hazardous materials. Overall, the revised project would not result in any new

potentially adverse hazards and hazardous materials impacts not previously considered and analyzed in the Draft EIR.

## TRANSPORTATION

The Draft EIR concluded that the previously analyzed project's impacts related to a conflict with adopted policies, plans, or programs related to transit, bicycle, or pedestrian facilities would result in less than significant impacts following compliance with State and Municipal Code requirements. Additionally, impacts regarding emergency access to the project site and an increase in hazards due to a geometric design feature or incompatible use would be reduced to less than significant levels upon implementation of Mitigation Measure TRA-1. Specifically, Mitigation Measure TRA-1 would require a Construction Management Plan (CMP), which would minimize project-related construction traffic impacts on the local circulation system and detail plans regarding emergency access to the site. Per Mitigation Measure TRA-1, all construction vehicles would carry the required hauling permits and would use the most direct route via the project site to I-5. As summarized in the Draft EIR, the previously analyzed project resulted in 16.8 vehicle miles traveled (VMT) per capita and was forecasted to be 16.9 VMT per capita by 2045. Therefore, the previously analyzed project's 16.9 VMT per capita did not exceed the City's threshold of significance of 18.11 VMT per capita and VMT impacts were determined to be less than significant.

The revised project would include modifications to the maximum number of building floors, dwelling units, density, FAR, public and private open spaces, and parking structure spaces. Specifically, the revised project would reduce the number of parking spaces available (by 95 spaces) to reflect the updated parking requirements. Such changes would result in reduced project trips as a result of the proposed project. The *Victoria Apt Specific Plan, Dana Point Revised Vehicle Miles Traveled (VMT) Analysis Technical Memorandum* (Updated VMT Analysis), prepared by Linscott, Law & Greenspan, Engineers and dated July 7, 2023, analyzed the change in VMT impacts associated with the revised project modifications; refer to Attachment 1, *Updated VMT Analysis*. Table 2-2, *Revised Project Average VMT*, details the revised project's VMT per capita within the project area, which is 16.7 VMT per capita and is forecasted to be 17.0 VMT per capita by 2045.

**Table 2-2**
**Revised Project Average VMT**

| Year | 2016 With Project | 2045 With Project | Compared to the Threshold (18.11 VMT per Capita) |
|---|---|---|---|
| VMT per Capita | 16.7 | 17.0 | -7.79% |

Source: Linscott, Law & Greenspan, Engineers, *Victoria Apt Specific Plan, Dana Point Revised Vehicle Miles Traveled (VMT) Analysis Technical Memorandum*, July 7, 2023; refer to Attachment 1.

As depicted in Table 2-2, the revised project's 17.0 VMT per capita would be well below the threshold of significance of 18.11 VMT per capita (7.79 percent lower). Additionally, the revised project's VMT per capita would be reduced by 0.1 VMT per capita (0.76 percent lower) compared to that analyzed in the Draft EIR. Therefore, the revised project's 17.0 VMT per capita does not exceed the City's threshold of significance of 18.11 VMT per capita and reduces the VMT per capita when compared to the previously analyzed project. Impacts are less than significant in this regard. Further, similar to the previously analyzed project, the revised project would not result in any new potentially adverse impacts regarding a conflict with adopted policies, plans, or programs related to transit, bicycle, or pedestrian facilities. Additionally, impacts regarding emergency access to the

project site and an increase in hazards due to a geometric design feature or incompatible use would continue to be reduced to less than significant levels upon implementation of Mitigation Measure TRA-1. Overall, the revised project would not result in any new potentially adverse transportation impacts not previously considered and analyzed in the Draft EIR.

## AIR QUALITY

The Draft EIR concluded that the previously analyzed project would not result in significant air quality impacts during construction and operation in regard to project consistency with the SCAQMD's *2022 Air Quality Management Plan* (AQMP) or exceed SCAQMD's regional thresholds for construction and operational air emissions. Additionally, it was determined that the previously analyzed project would not result in significant impacts regarding localized emissions impacts, exposure of sensitive receptors to substantial pollutant concentrations, or include any land uses associated with odor complaints. The revised project proposes fewer dwelling units and parking spaces, which would result in less construction activities, energy consumption, and vehicle trips, and thus would result in lower construction and operational emissions compared to the previously analyzed project in the Draft EIR. Further, the revised project would be consistent with the SCAQMD's AQMP, as the revised project proposes the same types of land use as the previously analyzed project, and therefore would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity as projected in the 2022 AQMP. Therefore, the revised project would not result in any new substantial impacts related to air quality that were not previously considered and addressed in the Draft EIR.

## GREENHOUSE GAS EMISSIONS

The Draft EIR concluded that the previously analyzed project would be consistent with applicable measures in the 2020-2045 RTP/SCS, 2017 Scoping Plan Update, General Plan, and *Dana Point Energy Efficiency and Conservation Plan* (Energy Plan), and thus the previously analyzed project's greenhouse gas emissions (GHG) would be less than significant. The revised project would proposes fewer dwelling units and parking spaces, which would result in less construction activities, energy consumption, water consumption, waste generation, and vehicle trips, and thus would result in lower construction and operational GHG emissions compared to the previously analyzed project in the Draft EIR.

On December 15, 2022, CARB released the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes and replaces the 2017 Scoping Plan Update. Specifically, the 2022 Scoping Plan Appendix D, *Local Actions*, includes key State actions that are directly relevant to the priority GHG reduction strategies as described in the 2022 Scoping Plan and should be accounted for in local target-setting. These key State actions include zero-emission light duty vehicles (relevant to transportation electrification); smart growth/VMT reduction (relevant to vehicle miles traveled reduction); and new and existing residential and commercial buildings (relevant to building decarbonization).

Due to this update, provided in Table 2-3, *Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors*, is an evaluation of applicable recommended reduction actions/strategies by emissions source category to demonstrate how the revised project would be consistent with or exceed reduction actions/strategies outlined in the 2022 Scoping Plan.

## Table 2-3
## Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors

| Actions and Strategies | Project Consistency Analysis |
|---|---|
| **Smart Growth / Vehicles Miles Traveled (VMT)** | |
| Reduce VMT per capita to 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045 | **Consistent**. The revised project would include modifications to the maximum number of building floors, dwelling units, density, FAR, public and private open spaces, and parking structure spaces. Specifically, the revised project would reduce the number of parking spaces available (by 95 spaces) to reflect the updated parking requirements. Such changes would result in reduced project trips as a result of the proposed project. As depicted in Table 2-2, *Revised Project Average VMT*, the revised project's 17.0 VMT per capita would be well below the threshold of significance of 18.11 VMT per capita (7.79 percent lower). Additionally, the revised project's VMT per capita would be reduced by 0.1 VMT per capita (0.76 percent lower) compared to that analyzed in the Draft EIR. Therefore, the revised project's 17.0 VMT per capita does not exceed the City's threshold of significance of 18.11 VMT per capita and reduces the VMT per capita when compared to the previously analyzed project. Overall, the revised project would contribute to the City's VMT reduction goal.<br><br>Additionally, the revised project is an infill development located near a transit station (Route 91 run by Orange County Transportation Authority). Further, the project site is located within a pedestrian-oriented area given that it fronts existing sidewalks to the north and west. The revised project is located in an urbanized area and within walking and biking distance to existing commercial and neighborhood-serving retail uses. The revised project would also provide bicycle parking spaces and electric vehicle (EV) parking spaces in accordance with CALGreen Code. As such, the revised project would be consistent with this action. |
| **New Residential and Commercial Buildings** | |
| All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030 | **Consistent.** Construction for the revised project is anticipated to be completed by 2026. The revised project consists of residential development and is expected to include natural gas heating and/or cooking on-site. The City of Dana Point has yet to adopt an ordinance or program limiting the use of natural gas for on-site cooking and/or heating; however, if adopted, the revised project would comply with the applicable goals or policies limiting the use of natural gas equipment in the future. It should be noted that the Draft EIR included quantification of approximate electricity and natural gas consumption. As shown in the Draft EIR Table 5.10-4, *Project and Countywide Energy Consumption*, the project's nominal energy usage would constitute an approximate 0.0096 percent increase over the County's typical annual electricity consumption, and an approximate 0.0041 percent increase over the County's typical annual natural gas consumption. As the revised project proposes the same types of land use and same sustainability project design features as the previously analyzed project with reduced dwelling units, the associated energy consumption is anticipated to be lower. Furthermore, the revised project would install high efficiency lighting and appliances. As such, the revised project would be consistent with this action. |
| **Construction Equipment** | |
| Achieve 25% of energy demand electrified by 2030 and 75% electrified by 2045 | **Consistent.** The City of Dana Point has not adopted an ordinance or program requiring electricity-powered construction equipment. However, if adopted, the revised project would comply with the applicable goals or policies requiring the use of electric construction equipment in the future. As such, the revised project would be consistent with this action. |
| **Non-combustion Methane Emissions** | |
| Divert 75% of organic waste from landfills | **Consistent**. SB 1383 establishes targets to achieve a 50 percent reduction in the |

| Actions and Strategies | Project Consistency Analysis |
|---|---|
| by 2025 | level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The revised project would comply with local and regional regulations and utilize waste management services that recycle or compost 75 percent of waste by 2025 pursuant to SB 1383. As such, the revised project would be consistent with this action. |

Source: California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, December 15, 2022.

Overall, similar to the previously analyzed project, the revised project would be consistent with applicable measures in the applicable plans such as the 2020-2045 RTP/SCS, the 2022 Scoping Plan, General Plan, and the City's Energy Plan, as the revised project proposes the same types of land use and same sustainability project design features as the previously analyzed project. Therefore, the revised project would not result in any new substantial impacts related to GHG that were not previously considered and addressed in the Draft EIR.

## ENERGY

The Draft EIR concluded that the previously analyzed project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. Additionally, it was determined that the previously analyzed project would comply with the California Building Energy Efficiency Standards, California Green Building Standards (CALGreen) Code, General Plan, and the City's Energy Plan. The revised project proposes fewer dwelling units and parking spaces, which would result in less energy consumption during project construction and operations compared to the previously analyzed project in the Draft EIR. Further, the revised project proposes the same types of land use and same sustainability project design features as the previously analyzed project, and therefore would comply with the California Building Energy Efficiency Standards, CALGreen Code, General Plan, and the City's Energy Plan. Thus, the revised project would not result in any new substantial impacts related to energy that were not previously addressed in the Draft EIR.

## NOISE

The Draft EIR concluded that while construction-related short-term noise levels have the potential to be higher than existing ambient noise levels in the project area under existing conditions, the noise impacts would no longer occur once project construction is completed. Construction noise would also be regulated by the City's noise standards and allowable hours of construction. The previously analyzed project would also implement a condition of approval, which would further reduce construction noise impacts to surrounding sensitive receptors. Short-term construction vibration impacts were determined to be less than significant in the Draft EIR. Operational noise impacts associated with the previously analyzed project, including mobile and stationary sources, were determined to be less than significant in the Draft EIR. The revised project's construction and operational activities would be similar, or proportionately reduced, compared to that analyzed in the Draft EIR, as the revised project would result in a decrease of required building construction (i.e., reduced dwelling units and maximum number of floors), compared to the previously analyzed project. As such, the revised project would not increase the anticipated vibration and noise impacts from that of the previously analyzed project nor would the revised project have new substantially

adverse effect on the project's overall operational noise impacts compared to that previously considered and analyzed in the Draft EIR.

## POPULATION AND HOUSING

The Draft EIR concluded that the previously analyzed project would be within SCAG's population and dwelling unit forecasts for 2045. Therefore, the previously analyzed project was determined to not result in substantial unplanned population growth and impacts in this regard would be less than significant. The revised project would not result in land use changes that substantially increase employment opportunities, nor implement any new policies that could induce substantial unplanned population growth. Rather, the revised project's dwelling unit total would be reduced by 43 dwelling units. Further, no housing is currently afforded on-site. As such, the revised project would not result in any new potentially adverse population and housing impacts not previously considered and analyzed in the Draft EIR.

## PUBLIC SERVICE/RECREATION AND UTILITIES

The Draft EIR determined that impacts of the previously analyzed project regarding school, library, and park services in the project area would be less than significant with compliance with the General Plan and Municipal Code, and impacts to police protection and fire protection services would be less than significant with compliance with the General Plan, Municipal Code, and Mitigation Measure TRA-1. Mitigation Measure TRA-1 would require implementation of a CMP to ensure adequate access for emergency vehicles during the construction phase of the project and to minimize project-related construction traffic impacts on the local circulation system. Additionally, the Draft EIR determined that the previously analyzed project's impacts on solid waste generation, dry utilities, water, stormwater, and wastewater services and infrastructure would be less than significant upon payment of all applicable impact fees. The revised project would not result in land use changes that substantially increase employment opportunities, nor implement any new policies that could induce substantial unplanned population growth. Rather, the revised project's dwelling unit total would be reduced by 43 dwelling units, proportionately reducing demands of public services and utilities, compared to that analyzed in the Draft EIR. Additionally, the revised project would slightly reduce the public open space acreage from 1.10 acre to 1.065 acre which would proportionately alleviate the City's parkland demand. As such, the revised project would not result in any new potentially adverse impacts related to public services, recreation, and utilities not previously considered and analyzed in the Draft EIR in this regard.

## OTHER CEQA CONSIDERATIONS

Potential effects of the proposed project description modifications related to other mandatory CEQA considerations are presented below, paralleling the discussion of these concerns presented in the Draft EIR.

### Long-Term Implications of the Proposed Project

Development of the previously analyzed project and subsequent long-term effects may impact the physical, aesthetic, and human environments. Long-term physical consequences of development include increased traffic volumes, increased noise from project-related mobile (traffic) and stationary (mechanical, landscaping, recreational, etc.) sources, hydrology and water quality impacts, and

increased energy and natural resource consumption. Incremental degradation of local and regional air quality would also occur due to mobile source emissions generated from project-related traffic, and stationary source emissions generated from the consumption of natural gas and electricity. However, as concluded in Draft EIR Section 5.0, *Environmental Analysis*, and Draft EIR Section 8.0, *Effects Found Not To Be Significant*, the previously analyzed project's impacts would be less than significant following compliance with the established regulatory framework and recommended mitigation measures. As supported by the preceding discussions, the proposed modifications to the previously analyzed project would result in no discernible environmental effects not previously considered in the Draft EIR, and would not result in any new potentially significant environmental effects. As such, the analysis presented in the Draft EIR is considered to encompass and include the environmental effects of the revised project, as modified. Therefore, the revised project would not have significant long-term implications in this regard.

**Irreversible Environmental Changes that Would be Involved in the Proposed Action Should it be Implemented**

Development of the previously analyzed project would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of individual developments. It is noted that the continued use of such resources would be on a relatively small scale in a regional context. Although irreversible environmental changes would result from project implementation, such changes would not be considered significant. The proposed modifications to the project's maximum number of building floors, dwelling units, density, FAR, public and private open spaces, and parking structure spaces would not result in any significant change to the required building materials, construction supplies, or energy usage. Thus, the revised project would not result in any new significant impacts, need for new mitigation, or significant irreversible environmental changes. The proposed modifications would not affect the analysis presented in the Draft EIR.

**Growth-Inducing Impacts of the Proposed Project**

Implementation of the previously analyzed project is not considered growth-inducing with respect to removing an impediment to growth, fostering economic expansion or growth, establishing a precedent-setting action, or encroaching into an isolated area of open space. However, the project is considered growth-inducing with respect to fostering direct population growth as a result of new residents on-site. Specifically, the previously analyzed project would allow up to 349 additional dwelling units in the City and would introduce up to 795 additional residents. The additional residents would increase the City's population over existing conditions (May 2022) from approximately 32,943 to 33,739 residents, an approximately 2.4 percent increase. The revised project's dwelling unit total would be reduced by 43 dwelling units. Consequently, the total number of additional residents would decrease from that analyzed in the Draft EIR. Therefore, the revised project would not foster population growth greater than that analyzed in the Draft EIR.

## CONCLUSION

Overall, the proposed modifications would result in no new significant impacts, would not increase in severity any environmental impacts of the project, and would not require any new mitigation measures, not previously analyzed in the Draft EIR. The revisions to the project do not substantially or fundamentally alter the conclusions or findings of the Draft EIR relative to the project's potential environmental effects or proposed mitigation measures. Therefore, in accordance with the standards set forth in CEQA Guidelines Section 15088.5, no recirculation of the EIR is required.

# Attachment 1: Updated VMT Analysis

# TECHNICAL MEMORANDUM

| | | | |
|---|---|---|---|
| To: | Ms. Kristen Bogue<br>Michael Baker International | Date: | July 7, 2023 |
| From: | Zawwar Saiyed, P.E., Associate Principal<br>Trissa Allen, P.E., Senior Transportation Engineer<br>Linscott, Law and Greenspan, Engineers | LLG Ref: | 2.21.4403.1 |
| Subject: | ***Victoria Apt Specific Plan, Dana Point***<br>***Revised Vehicle Miles Traveled (VMT) Analysis*** | | |

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Vehicle Miles Traveled (VMT) Analysis Technical Memorandum for the proposed Victoria Apt Specific Plan project (herein after referred to as "Project") in the City of Dana Point, Orange County, California. This Technical Memorandum updates our previous submittal dated September 30, 2022 to include an updated Project description and presents the VMT screening criteria, analysis methodology, significance thresholds, VMT analyses and conclusions. It should be noted that the approach and methodology outlined in this Technical Memorandum is generally consistent with the *Technical Advisory for Evaluating Transportation Impacts In CEQA,* published by the Governor's Office of Planning and Research (OPR), December 2018 (OPR Technical Advisory), which provides additional detail on the language and analysis procedures described in this Technical Memorandum.

The following sections of this Technical summarize the Project description, present OPRs VMT screening criteria, analysis methodology and thresholds, Project VMT and Cumulative VMT, and the conclusions.

## PROJECT DESCRIPTION

The proposed Project site is located within an area commonly referred to as Doheny Village. Doheny Village consists of approximately 80-acres and is located in the southeastern portion of Dana Point. The approximately 5.5-acre Project site is specifically located at 26126 Victoria Boulevard on the southeast corner of Victoria Boulevard and Sepulveda Boulevard in the southeastern portion of Doheny Village. The Project is bound by Victoria Boulevard to the north, the Interstate 5 (I-5) off-ramp to Pacific Coast Highway on the east, Pacific Coast Highway on the south, and Sepulveda Avenue on the west. The site consists of one parcel (Assessor's Parcel Number [APN] 668-361-01) owned by the Capistrano Unified School District (CUSD). Regional access to the site is provided via I-5 and Pacific Coast Highway. Local access is provided via Victoria Boulevard and Sepulveda Avenue. ***Figure 1*** presents a vicinity map for the Project site***.*** ***Figure 2*** presents an existing aerial of the Project site.

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Walter B. Musial, PE
Kalyan C. Yellapu, PE

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Existing Land Uses and Entitlements

The Project site is currently developed with seven structures and is used by the CUSD Ground Department for operations, maintenance, storage, bus/vehicle wash area, and refueling of school buses and other district vehicles. Only two of the seven structures located at the northwestern and northern portions of the site are currently in operations and utilized by the Grounds Department. The remainder of the site, including the former Tire Storage Building, Mechanic Shop, Transportation Office (previously used as the Serra School house), and refueling area are no longer in operation and are used mainly for storage purposes. Site access is afforded via two steel access gates along Sepulveda Avenue and three steel access gates along Victoria Boulevard. One pedestrian gate is also present on Sepulveda Avenue. Small areas of ornamental landscaping are present along the perimeter sidewalks to the west and east.

Proposed Project Development

The proposed Project involves the demolition of the existing CUSD bus yard and development of a three- to five-story, 306-unit apartment complex with an attached six-story (seven level) parking structure and associated amenities in accordance with the proposed Victoria Boulevard Specific Plan (Specific Plan). ***Figure 3*** presents the proposed site plan. As proposed, the Project would construct approximately 153,041 square-feet (SF) of open space, including 60,422 SF of private open space (patios, roof deck), 11,501 SF of common (indoor) open space, and 81,118 SF public open space.

Based on the *Dana Point General Plan* (General Plan) Land Use Map, the Project site is designated "Community Facility" (CF) and "Recreation/Open Space" (R/OS) and is situated within the Coastal Overlay Boundary.

Based on the *Dana Point Zoning Map* (Zoning Map), the Project site is zoned "Community Facilities" (CF) and "Recreation" (REC) and is situated within the Coastal Overlay boundary. The northwestern portion of the project site is also located in the Floodplain Overlay (FP-2) boundary.

## PROJECT SCREENING CRITERIA

Under the VMT methodology, screening is used to determine if a project will be required to conduct a detailed VMT analysis. Since the City of Dana Point currently doesn't have adopted VMT screening criteria, the following section discusses the various screening methods recommended by the State of California in the *OPR Technical Advisory* and whether the Project will screen-out, either in its entirety, or partially based on individual land uses.

Proximity to Transit Facilities

As noted previously, the CEQA Guidelines were amended to include section 15064.3, "Determining the Significance of Transportation Impacts". Subsection (b)(1) states in part:

> *"Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact."*

Pursuant to the statute, development projects may be screened out of VMT analysis based on proximity to certain transit facilities due to the presumption of less than significant impacts. The *Technical Advisory* reiterates this screening criteria, but also highlights certain project-specific or location-specific characteristics which may indicate the project will still generate "significant levels of VMT", even when located within one-half mile of a major transit stop or a stop along a high-quality transit corridor. These characteristics relate to the project's floor area ratio (FAR), parking supply, and number of dwelling units, as well as consistency with the applicable Sustainable Communities Strategy (SCS). If the project has any characteristics which indicate that the presumption of less than significant impacts as stated in the CEQA Guidelines may not be appropriate, the *OPR Technical Advisory* recommends that the project should not be screened out of further VMT analysis.

*Based on the above, the proposed Project will not screen-out since it is not within one-half mile of neither an existing major transit stop[1] nor a stop along an existing high-quality transit corridor[2].*

Small Projects

The *OPR Technical Advisory* recommends that VMT analyses be conducted for projects which are forecast to generate 110 or more average daily trips (ADT). The CEQA Guidelines provide a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet[3]. OPR states that "typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact." OPR thus reasons that projects which are forecast to generate fewer than 110 daily

[1] *Public Resources Code Section 21064.3*: "'Major Transit Stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods."

[2] *Public Resources Code Section 21155*: "For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours."

[3] CEQA Guidelines Section 15301, Subsection (e)(2).

trips would be comparable to categorically exempt projects and could be presumed to cause less than significant impacts.

*Based on the above, the proposed Project will not screen-out since it generates more than 110 daily trips.*

Map-Based Screening

An additional screening methodology is provided for residential and office land use projects. Lead agencies may prepare maps based on a regional travel demand model or travel survey data to illustrate areas that are currently below the selected VMT threshold. OPR reasons that if a project has similar characteristics to the existing area (i.e., density, mix of uses, transit service, etc.), it will tend to exhibit similar VMT. Therefore, if a project is fully located within an area identified as having a below-threshold VMT, it may be presumed to also have less than significant VMT impacts and be screened out from requiring a detailed VMT analysis.

*Based on the above, the proposed Project will not screen-out since no map-based screening is available.*

Additional Screening Considerations

OPR provides additional recommendations on when the presumption of less than significant impacts may be appropriate, in addition to the formally recommended screening criteria described above. For instance, in the discussion regarding retail projects, the *OPR Technical Advisory* advises lead agencies that because local serving retail projects tend to improve retail destination proximity, shorten trips, and reduce VMT, they may be presumed to have less than significant impacts. Agencies may choose to define what constitutes local serving retail in their jurisdiction, although OPR suggests a threshold size of 50,000 square feet or less. Thus, lead agencies may choose to screen out projects based on the type and size of the land use(s) being proposed.

Further, OPR states that mixed-use projects should analyze each land use individually.

*Based on the above, the proposed Project will not screen-out, thus requiring a full VMT analysis as presented in this Technical Memorandum.*

Additionally, the *OPR Technical Advisory* cites research that could support the presumption of less than significant impacts for 100% affordable housing projects, on the basis that low-wage workers are more likely to choose housing close to their workplaces, thus reducing commute distances and VMT.

*Based on the above, the proposed Project will not screen-out since it is not a 100% affordable housing project.*

***Flow Chart 1*** presents the recommended screening criteria, as discussed above, for land use projects consistent with the *OPR Technical Advisory*. It should be noted that a land use project only needs to satisfy one of the screening criteria of the flow chart to qualify for screening.

## VEHICLE MILES TRAVELED (VMT) ANALYSIS METHODOLOGY

According to OPR, Projects that do not screen out based on the aforementioned criteria shall complete a full VMT analysis. In the absence of the City of Dana Point VMT guidelines, the VMT analysis methodology as provided by OPR has been utilized. The following summary of the guidelines has been prepared based on a review of the revisions to the CEQA Guidelines and OPR's current *Technical Advisory*.

It should be noted that according to OPR, "vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project. Here, the term "automobile" refers to on-road passenger vehicles, specifically cars, and light trucks. The primary reason being, as mentioned previously, is to align with the State's three statutory goals; (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses.

### OPR's Guidance on Methodology for Project Impacts

According to OPR, tour-based and trip-based approaches offer the most viable methods for determining VMT from residential projects, office project and retail projects, and for comparing those results to VMT thresholds. These approaches also offer the simplest methodology for determining VMT reductions from mitigation measures for residential projects, office project and retail projects.

Based on the above, a full VMT analysis utilizing the Orange County Transportation Analysis Model (OCTAM) has been used to determine the VMT for the Project and for the City of Dana Point average and will provide the following:

- Home-based average VMT per Capita for residential land uses.

Finally, the Project average VMT will then be compared to the City of Dana Point average to determine whether or not the Project will have a significant impact based on the significance thresholds defined in this Technical Memorandum.

### OPR's Guidance on Methodology for Cumulative Impacts

OPR states that a Project's cumulative impacts are based on a determination of whether the "incremental effects of an individual project are considerable when

viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." When using an absolute VMT metric, i.e., total VMT, analyzing the combined impacts for a cumulative impact analysis may be appropriate. A project that falls below the threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the Project impact. Accordingly, a less than significant Project impact would imply a less than significant cumulative impact, and vice versa.

## VEHICLE MILES TRAVELED (VMT) SIGNIFICANCE THRESHOLDS

As previously discussed, a project that meets the screening criteria will require preparation of a detailed transportation analysis. The project VMT will be evaluated in order to determine if the project is expected to cause a significant transportation impact. Under the VMT methodology, a transportation impact is considered significant if the project-related VMT is equal to or exceeds the thresholds.

Mitigation of project transportation impacts is required whenever VMT generated by the proposed development causes an increase of the analyzed VMT by an amount greater than the predetermined significance thresholds.

The following section discusses the VMT impact thresholds recommended by the State for residential projects, office project and retail projects.

### OPR's Guidance on Thresholds

Public Resources Code Section 21099 provides the criteria for determining the significance of transportation impacts. There are three statutory goals that the significance criteria must promote: (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses. The *OPR Technical Advisory* provides OPR's recommendations for quantitative thresholds of significance, which align with the State's three statutory goals. The recommended significance thresholds were developed from legislative mandates and state policies (i.e., AB 32, SB 375, SB 391 and a number of Executive Orders) that established quantitative GHG emissions reduction targets.

The *OPR Technical Advisory* states that a fifteen percent (15%) reduction in VMT is achievable for development projects in a variety of place types and is consistent with SB 743's direction to OPR to select a threshold that aligns with the State's three statutory goals.

### *Residential Projects*

For residential projects, the existing VMT per capita may be measured from city or regional averages. If city VMT per capita is used as a basis for a significance threshold in a Metropolitan Planning Organization (MPO) area, the project should not

cumulatively exceed the population or number of units specified in the SCS for that city and should be consistent with the SCS. Exceeding the population or the number of units specified in the SCS would undermine the GHG reduction targets stated in SB 375.

For residential projects located in unincorporated county areas, the Technical Advisory provides additional recommendations as a basis for significance thresholds:

- "The local agency can compare a residential project's VMT to (1) the region's VMT per capita, or (2) the aggregate population-weighted VMT per capita of all cities in the region."

The Technical Advisory applies the thresholds for residential projects to either household (i.e., tour-based) VMT or home-based (i.e., trip-based) VMT assessments. It should be noted that the metric used to determine project VMT and the city-wide or regional VMT must be consistent (i.e., "apples to apples" comparison).

*Thresholds of Significance*

It should be noted that the *OPR Technical Advisory* provides recommendations for thresholds of significance for only three types of development, focusing only on the project types which tend to have the greatest effect on VMT. The *OPR Technical Advisory* does not provide recommendations on thresholds for other kinds of development projects. The three main development project types, residential, office, and retail may be considered proxies for developments which exhibit certain trip/travel characteristics as shown below:

- "Residential" may be considered a proxy for a development which generates new trips.
- "Office" may be considered a proxy for a development which generates primarily work trips.
- "Retail" may be considered a proxy for a development which primarily attracts already existing trips, leading to a diversion of trips rather than generating new trips.

If a project can be demonstrated to match one of these proxy categories, the applicable thresholds may be utilized. Thus, the proposed Project components are expected to generate new trips and have been analyzed under the residential threshold as listed below:

➢ A proposed Residential project exceeding a level of 15% below average existing regional (in this case City of Dana Point) VMT per capita may indicate a significant transportation impact.

## VEHICLE MILES TRAVELED (VMT) ANALYSIS

Summarized below are the average VMT per values utilizing OCTAM for the City of Dana Point and the proposed Project. It should be noted that the Project is located in Traffic Analysis Zone (TAZ) 1706 and the Project development totals were converted into Socio-Economic Data (SED) and inputted into OCTAM. ***Figure 4*** presents the TAZ Map from OCTAM.

| City of Dana Point | | | |
|---|---|---|---|
| **Year** | **2016 Existing** | **2045 Entitled** | **Threshold (15% below 2045 Entitled)** |
| **VMT per capita** | 21.5 | 21.3 | 18.11 |

| Project (TAZ 1706) | | | |
|---|---|---|---|
| **Year** | **2016 With Project** | **2045 With Project** | **Compared to Threshold (2045 Entitled)** |
| **VMT per capita** | 16.7 | 17.0 | 7.79% Lower |

Project VMT Significance Thresholds

As presented above and based on the criteria outlined in this report, the proposed Project does not exceed a level of 15% below City of Dana Point average VMT per capita threshold as the Project is 7.79% below the City of Dana Point average VMT per capita threshold and thus does not have a significant Project VMT impact for the residential land use.

Cumulative VMT Significant Impact

As previously mentioned and according to the *OPR Technical Advisory*, a less than significant Project impact would imply a less than significant cumulative impact. Hence, there is no Cumulative significant VMT impact.

## CONCLUSION

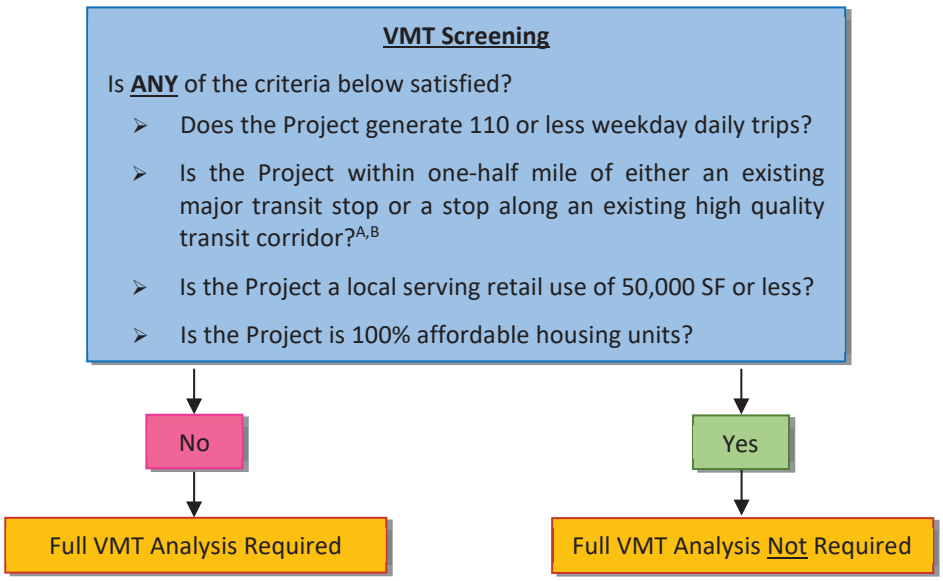
Consistent with the *OPR Technical Advisory* and based on the VMT methodology, criteria, guidelines, thresholds and results outlined in this Technical Memorandum, the proposed Project will not have a significant Project VMT impact nor a significant cumulative impact.

* * * * * * * * * * *

We appreciate the opportunity to provide this Technical Memorandum. Should you have any questions regarding the memorandum, please contact us at (949) 825-6175.

LINSCOTT LAW & GREENSPAN engineers

## FLOW CHART 1
## VMT SCREENING CRITERIA FLOW CHART



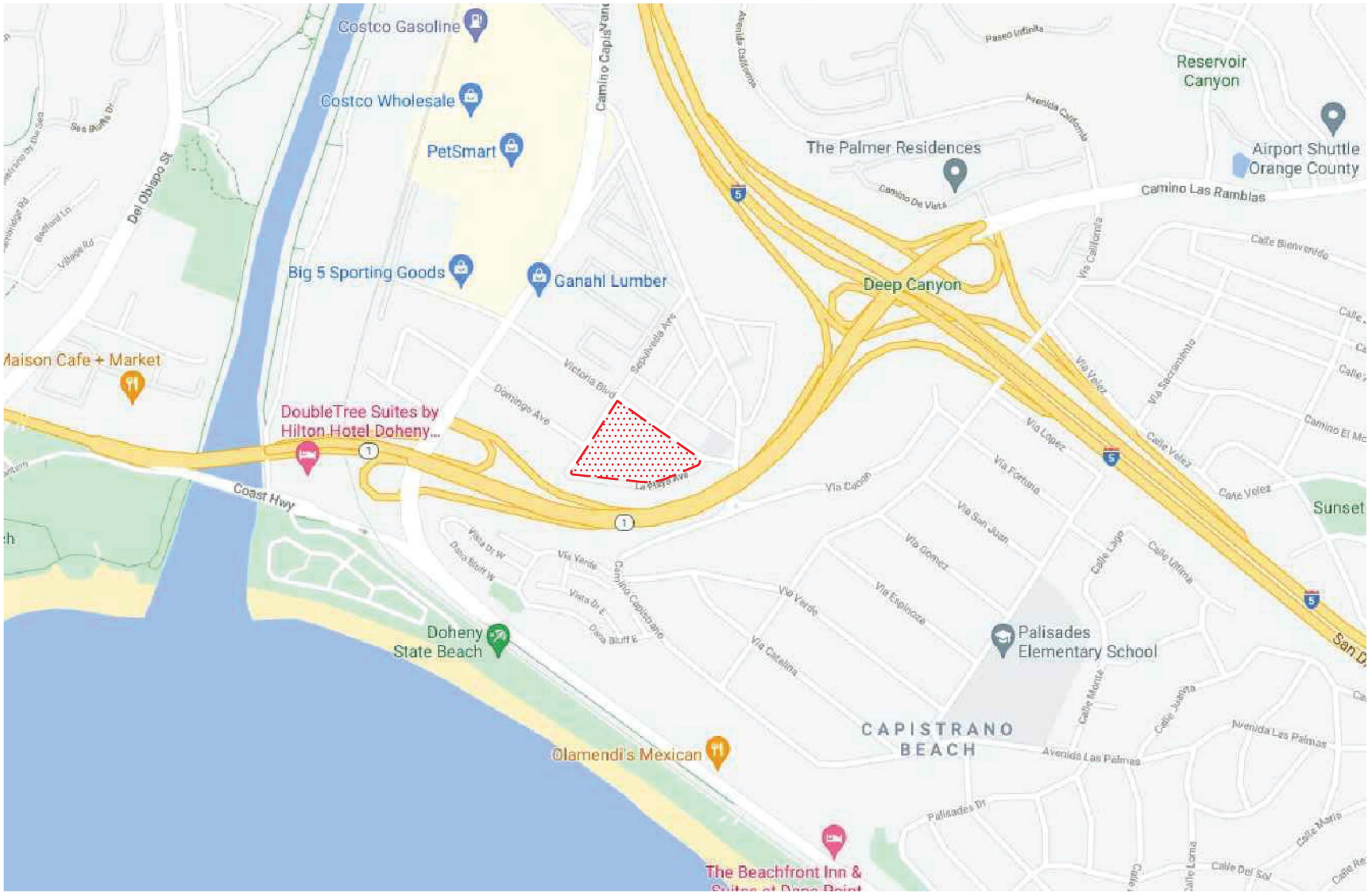




**Notes:**

A. "Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

B. "High-quality transit corridor" means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.




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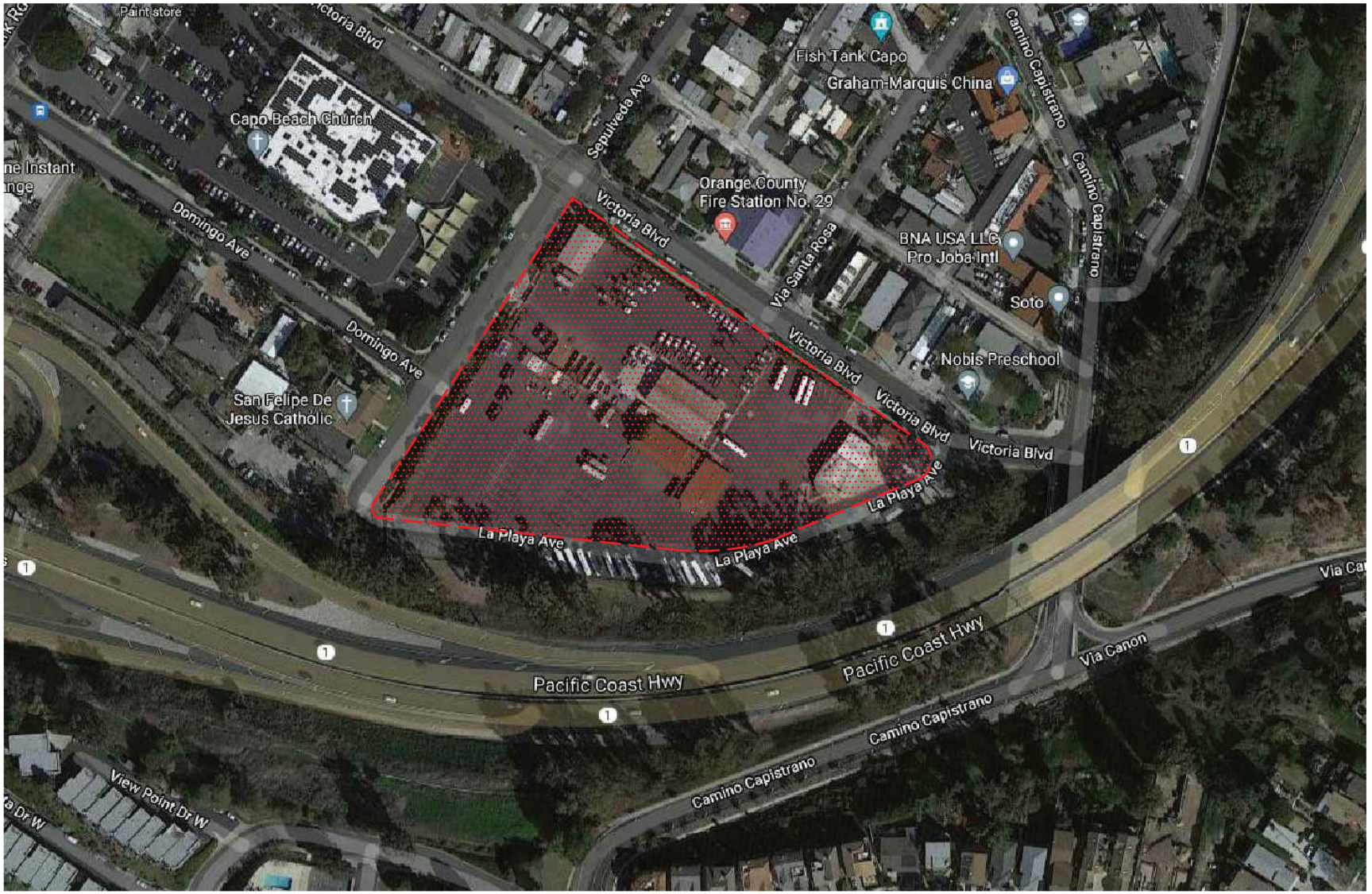
SOURCE: GOOGLE

KEY
= PROJECT SITE

# FIGURE 1

## VICINITY MAP

VICTORIA APT SPECIFIC PLAN, DANA POINT




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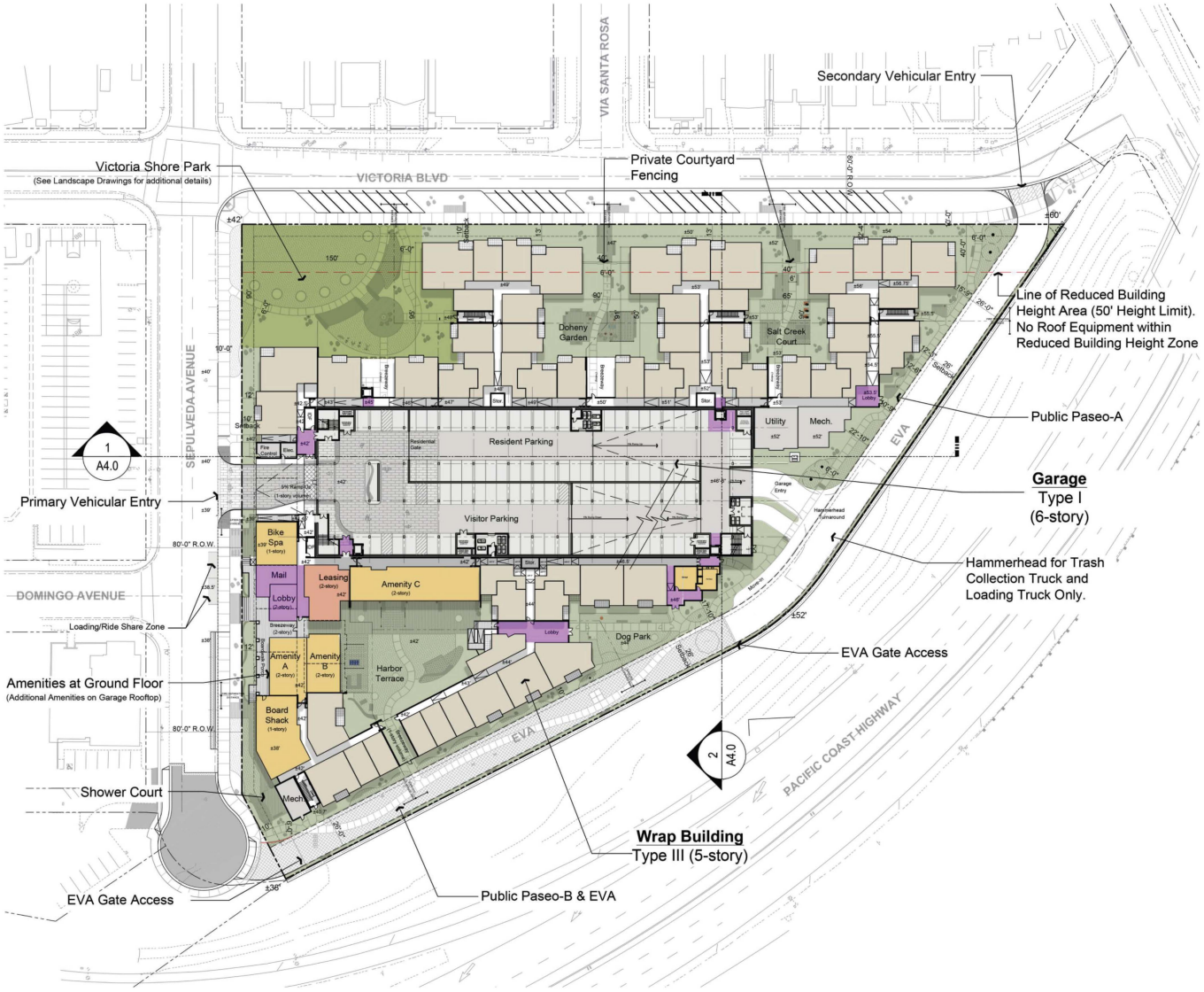
KEY

= PROJECT SITE

# FIGURE 2

## EXISTING SITE AERIAL

VICTORIA APT SPECIFIC PLAN, DANA POINT




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N NO SCALE

SOURCE: KTGY

# FIGURE 3

## PROPOSED SITE PLAN

VICTORIA APT SPECIFIC PLAN, DANA POINT




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SOURCE: OCTA

# FIGURE 4

**TAZ MAP**

VICTORIA APT SPECIFIC PLAN, DANA POINT




# 3.0 Response to Comments

This document is designed for double-sided printing to conserve natural resources.

# 3.0 RESPONSE TO COMMENTS

In accordance with the *California Environmental Quality Act Guidelines* (CEQA Guidelines) Section 15088, the City of Dana Point, as the lead agency, evaluated the written comments received on the Draft Environmental Impact Report (Draft EIR) (State Clearinghouse No. 2021070304) for the proposed Victoria Boulevard Apartments (project) and has prepared the following responses to the comments received (Responses to Comments). This Response to Comments section is part of the Final EIR for the project in accordance with CEQA Guidelines Section 15132.

A list of public agencies, organizations, and interested persons that provided comments on the Draft EIR is presented below. Each comment has been assigned a letter number. Individual comments within each comment letter have been numbered so comments can be cross-referenced with responses. The text of each comment letter that was received is reprinted in this Chapter and followed by the corresponding response. The comment letters received included similar comments on certain recurring environmental concerns. The City's responses to those recurring issues are presented below as Master Responses (MR) and subsequently referenced in response to individual comment letters where applicable.

| Comment Letter No. | Commenter | Letter Dated |
|---|---|---|
| **Agencies** | | |
| A-1 | Orange County Fire Authority, Robert J Distaso, Fire Safety Engineer | February 27, 2023 |
| A-2 | Orange County Transportation Authority, Dan Phu, Environmental Programs Manager | March 1, 2023 |
| A-3 | California Department of Transportation, Scott Shelley, Branch Chief District 12 | March 2, 2023 |
| A-4 | California Coastal Commission, Fernie Sy, Coastal Program Analyst | March 6, 2023 |
| **Organizations** | | |
| O-1 | Southwest Mountain States Regional Council of Carpenters, Jason A. Cohen, Esq. | February 7, 2023 |
| O-2 | Southwest Mountain States Regional Council of Carpenters, Jason A. Cohen, Esq. | March 6, 2023 |
| O-3 | Supporters Alliance for Environmental Responsibility, Adam Frankel | March 2, 2023 |
| **Interested Persons** | | |
| I-1 | Dottie McLane | January 29, 2023 |
| I-2 | Mary Booth | January 30, 2023 |
| I-3 | Ray Valles | January 30, 2023 |

| | | |
|---|---|---|
| I-4 | Ashley Schenkel | January 31, 2023 |
| I-5 | Jocelyn Brennan | January 31, 2023 |
| I-6 | Sheila Daniels | January 31, 2023 |
| I-7 | Sara Aplanalp | January 31, 2023 |
| I-8 | Suzanne Aplanalp | February 1, 2023 |
| I-9 | Suzanne Hinman | February 3, 2023 |
| I-10 | Brad Smith | February 4, 2023 |
| I-11 | Larry Dorn | February 5, 2023 |
| I-12 | Dan Vincent | February 6, 2023<br>March 1, 2023 |
| I-13 | Rich Burnham | February 9, 2023<br>March 4, 2023 |
| I-14 | Brent Neumeyer | February 9, 2023<br>March 6, 2023 |
| I-15 | Blake Davis | February 12, 2023 |
| I-16 | Kymberlee Stanley | February 14, 2023 |
| I-17 | Jim Waggoner | February 14, 2023 |
| I-18 | Larry Robinson | February 14, 2023 |
| I-19 | Richard Law | February 19, 2023<br>February 19, 2023 |
| I-20 | Cheryl Pribble | February 20, 2023 |
| I-21 | Marisa Boehme | February 23, 2023 |
| I-22 | Debbi Mellah | February 26, 2023 |
| I-23 | Christine Maclean | February 27, 2023 |
| I-24 | Bill Boehme | February 28, 2023 |
| I-25 | Vipul Mehta | March 1, 2023 |
| I-26 | Nancy Blackburn | March 1, 2023 |
| I-27 | Christine VandeSteeg | March 2, 2023 |
| I-28 | Mark Schutz | March 2, 2023 |
| I-29 | Christine Loock | March 2, 2023 |
| I-30 | Ana Slingluff-Barral | March 2, 2023 |
| I-31 | Karen Ezell | March 3, 2023 |
| I-32 | Cheryl Ann Wing | March 3, 2023<br>March 3, 2023 |
| I-33 | Olivia Conkle | March 3, 2023 |
| I-34 | Mary Vidrine | March 3, 2023 |
| I-35 | Jill Richardson | March 3, 2023 |

| | | |
|---|---|---|
| I-36 | Richard Morgan | March 3, 2023 |
| I-37 | Sandy Szemenyei | March 3, 2023 |
| I-38 | Cayleigh Robinson | March 4, 2023 |
| I-39 | Mickey and Peggy Munoz | March 4, 2023 |
| I-40 | Diane Tosetti | March 4, 2023 |
| I-41 | Mary Murphy | March 4, 2023 |
| I-42 | Alise Bowman | March 5, 2023 |
| I-43 | Chris Orsburn | March 5, 2023 |
| I-44 | Kathyrn Brooks | March 5, 2023 |
| I-45 | Catherine Marra | March 5, 2023 |
| I-46 | Vicki Smith | March 5, 2023 |
| I-47 | Travis Scott | March 5, 2023 |
| I-48 | Maxine Richardson | March 5, 2023 |
| I-49 | Jana Hofmann | March 5, 2023 |
| I-50 | Wesley Miller | March 5, 2023 |
| I-51 | Tyler Bowman | March 5, 2023 |
| I-52 | Chuck and Linda Pillsbury | March 5, 2023 |
| I-53 | Hale McDaniel | March 5, 2023 |
| I-54 | Dr. Claire Morrison | March 5, 2023 |
| I-55 | Debbi Mellah | March 5, 2023 |
| I-56 | Kimberly Lombard | March 5, 2023 |
| I-57 | Adele Roberson | March 5, 2023 |
| I-58 | Diane Troxel | March 5, 2023 |
| I-59 | Rose Sparks | March 5, 2023 |
| I-60 | Mary Ellen Murphy | March 5, 2023 |
| I-61 | Steve Carter | March 5, 2023 |
| I-62 | Robert Mc Cumsey | March 6, 2023 |
| I-63 | Oren Anderson | March 6, 2023 |
| I-64 | Jim Reese | March 6, 2023<br>March 6, 2023 |
| I-65 | Jim Schad | March 6, 2023 |
| I-66 | Courtney Welter | March 6, 2023 |
| I-67 | Steve Carpenter | March 5, 2023 |
| I-68 | Chris and Sheryl Van Ruiten | March 6, 2023 |
| I-69 | Kaikea Wilinski | March 6, 2023 |

| | | |
|---|---|---|
| I-70 | Rhys Parsons | March 6, 2023 |
| I-71 | Karrie Bechtloff | March 6, 2023 |
| I-73 | Philip Tillery | March 6, 2023 |
| I-74 | Kathryn Carpenter | March 6, 2023 |
| I-75 | Carol Wilson | March 6, 2023 |
| I-76 | Sandra Oberhauser | March 6, 2023 |
| I-PW | Public Workshop | February 27, 2023 |
| **Letters Received after the Close of the Public Review Period** | | |
| L-1 | Whitworth | March 7, 2023 |
| L-2 | Melinda Matranga | March 7, 2023 |
| L-3 | Karla Carroll | March 9, 2023 |
| L-4 | Robert Mc Cumsey | March 9, 2023 |

# Master Responses

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## MR-1 AFFORDABLE HOUSING

Multiple commenters requested clarifications on the proposed affordable housing units. Specifically, a commenter recommends a system be put in place where members of the community can apply for low-income housing in their area. Additionally, a commenter requests information as to where the low-income housing units would be located on-site and the associated monthly rental costs. Determination of rent affordability, monthly rental costs, the selection process, and overall management of the affordable housing units will be determined and detailed in an Affordable Housing Agreement between the City and the project Applicant, as part of the Development Agreement that will be entered into between the City and the project Applicant, and approved by the City Council.

Further, as discussed in Draft EIR Section 3.4, *Project Characteristics* (page 3-11), of the proposed dwelling units, the project proposes 15 percent affordable units allocated as follows: a minimum of five percent very low-, five percent low-, and five percent moderate-income. The units would be distributed throughout the proposed building.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. Specifically, although the percentage of affordable units in each income category have not changed, the reduction in overall units has resulted in a proportionate reduction in affordable units. The dwelling unit total was reduced by 43 dwelling units from 349 to 306 dwelling units. Thus, the affordable unit total was proportionately reduced by seven units from 53 to 46 affordable units. These revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

## MR-2 TRAFFIC CONGESTION/SB 743 VMT ANALYSIS

Multiple commenters expressed concern about traffic congestion caused by the proposed project along local City streets during peak traffic hours. As discussed in Draft EIR Section 5.7, *Transportation* (page 5.7-1), the adoption of Senate Bill 743 (SB 743) in 2013 changed the way transportation impact analysis is conducted under CEQA. SB 743 identifies Vehicle Miles Traveled (VMT) as the most appropriate CEQA transportation metric and eliminates auto delay, or level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant traffic impacts under CEQA. Accordingly, a VMT analysis was prepared for the project (*Victoria Apt Specific Plan, Dana Point Revised Vehicle Miles Traveled (VMT) Analysis Technical Memorandum*, prepared by Linscott, Law and Greenspan, Engineers, dated September 30, 2022) and summarized in the Draft EIR Section 5.7.4, *Impacts and Mitigation Measures* (pages 5.7-9 through 5.7-12). The analysis concluded that VMT impacts would be less than significant.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. The modifications to the project would result in a reduction of 43 units, from 349 to 306 units. The *Victoria Apt Specific Plan, Dana Point Revised Vehicle Miles Traveled (VMT) Analysis Technical Memorandum* (Updated VMT Analysis), prepared by Linscott, Law & Greenspan, Engineers and dated July 7, 2023, analyzed the change in VMT impacts associated with the revised project. As detailed in Section 2.0, the revised project's VMT per capita would be 16.7 VMT per capita and is forecasted to be 17.0 VMT per capita by 2045. The revised

project's VMT per capita would increase by 0.1 VMT per capita compared to the original project analyzed in the Draft EIR, but at 17.0 VMT per capita, the revised project would still be 7.79 percent below the City's threshold of significance of 18.11 VMT per capita. Therefore, the revised project would not result in new significant VMT increases. These revisions to the project do not change the conclusions presented in the Draft EIR. Nor would any new or substantially greater significant impacts result as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

## MR-3 CUSD ALLOCATION OF PROJECT FUNDS

Several commenters request information regarding the decision making body responsible for allocating $40 million, to be secured by lease revenues from the project, for improvements to Dana Hills High School.

On December 12, 2018, the Capistrano Unified School District (CUSD) passed Resolution No. 1819-25 *"Resolution of the board of trustees of the Capistrano Unified School District approving agreements to lease district surplus real property and directing staff to assess potential uses of the lease proceeds"* approving a 99-year ground lease with the project Applicant for the project site. Based on Resolution No. 1819-25, CUSD intends to utilize the lease revenues to invest in Dana Point schools. RH Dana Elementary School and Dana Hills High School are the two most likely candidates for investment, since they both have identified needs for seismic improvements.

The needed seismic improvements at Dana Hills High School campus are estimated to cost $105 million. Complete campus modernization for Dana Hills High School is estimated at $200 million. The ongoing revenue stream from the lease of the project site is one "piece of the puzzle" for funding those improvements. By selling Certificates of Participation (COPs) which are secured by the lease revenues, CUSD could receive a lump sum of approximately $40 million for capital improvements at Dana Hills High School.

## MR-4 PARKING STANDARDS AND PROPOSED PARKING

Several commenters raised concern regarding the adequacy of off-street parking spaces. It is acknowledged that parking is not specifically a CEQA environmental impact. (Save Our Access – San Gabriel Mountains v. Watershed Conservation Authority (2021) 68 Cal.App.5th 8.) Notwithstanding, parking considerations are still made pertaining to the project's consistency with local land use regulations/policies. As discussed in Draft EIR Section 3.4, *Project Characteristics* (page 3-17), based on the Specific Plan off-street parking standards, residential parking would be required at a ratio of 1.5 to 2.5 spaces per unit (depending on the number of bedrooms) and guest parking would be required at a ratio of 0.2 spaces per unit. For the project, the proposed Specific Plan regulations would require 669 off-street parking spaces. The parking structure, as proposed, would include 681 spaces (1.95 spaces per unit), with 609 spaces for residents and 72 spaces for visitors, which exceeds the Specific Plan parking requirement by 12 parking spaces. Thus, the project as proposed complies with the Specific Plan off-street parking standards. As concluded in the Draft EIR, Impact Statement LU-2, future development on-site would be required to comply with the Specific Plan development standards, including those pertaining to parking. Thus, upon approval of the proposed Zone Change, the project would not conflict with the Municipal Code. Impacts would be less than significant.

As discussed in Section 2.0, since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project. Among others, the revised project would reduce the number of units by 43 units from 349 to 306 units. The reduction in unit count would proportionally reduce the number of provided parking spaces by 95 spaces from 681 to 586 total spaces. The provided parking spaces would continue to meet the Specific Plan parking standards. These revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). To that end, while parking is not a CEQA environmental impact, the City of Dana Point decision makers will consider all comments on the proposed project before taking final action.

## MR-5 LOW DENSITY ALTERNATIVE

Multiple commenters are concerned about the project's density and request a lower density alternative be considered. As discussed in Draft EIR Section 7.5, *"Village Commercial/Residential Zoning District Development" Alternative* (pages 7-12 through 7-17), the "Village Commercial/Residential (VC/R) Zoning District Development" Alternative was selected for analysis to evaluate an alternative that is consistent with adjacent zoning per the Doheny Village Zoning District Update and to determine whether it would reduce any potentially significant impacts associated with the proposed project. Based on the analysis, the "VC/R Zoning District Development" Alternative would result in reduced environmental impacts regarding tribal and cultural resources; air quality; GHG emissions; energy; noise; population and housing; and public services and recreation. This alternative would result in similar impacts to the proposed project regarding land use and planning; aesthetics/light and glare; geology and soils, hydrology and water quality, hazards and hazardous materials, and transportation; refer to Draft EIR Table 7-4, *Comparison of Alternatives* (page 7-18). Overall, it was determined that the "Village Commercial/Residential (CV/R) Zoning District Development" Alternative would achieve the project's basic objectives, although not to the extent of the project. The Draft EIR determined that the "VC/R Zoning District Development" Alternative would achieve the project's basic objectives, although not to the extent of the proposed project.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. The revised project would generally reduce the overall density (a reduction of 43 units from 349 to 306 units) and building heights (as seen from Victoria Boulevard) by one level. Potential environmental impacts resulting from the proposed modifications are evaluated in Section 2.0. Overall, the proposed modifications would not result in any new significant impacts, would not increase in severity any environmental effects of the project, and would not require any new mitigation measures not previously considered in the Draft EIR. The revisions to the project do not substantially or fundamentally alter the conclusions or findings of the Draft EIR relative to the project's potential environmental effects or proposed mitigation measures. Therefore, in accordance with CEQA Guidelines Section 15088.5, no recirculation of the Draft EIR is required.

## MR-6 BUILDING HEIGHT AND MASSING/LAND USE COMPATIBILITY

Several commenters raised concerns regarding the proposed building height and massing and its compatibility with the surrounding environment (Doheny Village). Draft EIR Section 5.2, *Aesthetics/Light and Glare*, evaluates the project's consistency with applicable regulations governing scenic quality and provides photosimulations to evaluate whether the project would obstruct public views along scenic corridors and provide a general concept of proposed building heights, setbacks, and architectural reliefs; refer to Draft EIR Exhibits 5.2-2, *Key View 1 – Existing and Proposed Condition*, through 5.2-5, *Key View 4 – Existing and Proposed Condition*. Based on the analysis, the Draft EIR determined that the project would not obstruct public views along scenic corridors.

Further, as discussed in Draft EIR Section 5.2, *Aesthetics/Light and Glare* (pages 5.2-15 through 5.2-17), within "reduced building height zones" along Victoria Boulevard, no portion of the building would exceed a height of 50 feet within 40 feet of the Victoria Boulevard right-of-way, each building projection would have a minimum 10-foot setback, and no projections in excess of 50 feet are permitted within this zone. Outside of the "reduced building height zones," structures would have a maximum height of 65 feet, exclusive of rooftop projections which may extend an additional 10 feet. It should be noted that there are multiple ways in which site design can ensure height and massing of future development within the project area is sensitive to existing streetscape, especially along Victoria Boulevard. Site planning guidelines include elements to reduce the appearance of overall mass and provide pedestrian scale, vertical breaks, and streetscapes; create barriers between the parking garage and the proposed dwelling units and the public; and encourage a high level of design to improve scenic quality at the project site. The project's primary community entry would occur along Sepulveda Avenue and an Arrival Promenade is proposed to serve as a gateway into the development. The Arrival Promenade may include, but is not limited to enhanced entry drive paving, an art wall, a synthetic turf, and parkway landscaping, among other amenities to provide a "sense of place" and function as common open space. Courtyards, plazas, and open space areas on-site may occur long the exterior of the development facing a public street to provide visual interest. Landscaping would also soften the urban experience and provide a distinct visual impression and building identity.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. Specifically, the maximum number of building floor levels were reduced to range between two to four floors along the northern elevation (along Victoria Boulevard); two to five floors along the eastern elevation (along Pacific Coast Highway [PCH]); four to five floors along the southern elevation (along PCH); and two to five floors along the western elevation (along Sepulveda Avenue). The revised project anticipates the building's siting, architectural design, and building materials, as well as overall building heights proposed, would remain the same. However, the decrease in number of building floor levels would reduce the visible massing on-site (as seen from Victoria Boulevard), compared to the previously analyzed project. However, since the overall building heights would remain the same, the project's less than significant impacts associated with the view blockage of the Pacific Ocean as experienced by motorists traveling along southbound Interstate 5 (I-5) travel lanes and the southbound I-5 off-ramp to northbound PCH travel lanes would remain the same. Similar to the previously analyzed project, the revised project would be consistent with applicable General Plan Urban Design Element policies governing scenic quality and Specific Plan Design Guidelines and Development Standards, including maximum building height limits, the preservation of PCH's function as a visual corridor with views to attractive and existing urban scenes, and PCH's role as an urbanscape corridor and State scenic highway. Further, the revised project would be consistent with applicable zoning and regulations related to scenic quality.

Similar to the previously analyzed project, the revised project would be subject to the Specific Plan Design Guidelines and Development Standards (e.g., lot size, setback, density, open space, and landscaping requirements. Additionally, the revised project would reduce visible massing at the site by reducing the project's floor area ratio from 1.8 to 1.6, reducing density from 63.3 to 55.5 dwelling units per acre, and proportionately reduce public open space acreage from 1.10 to 1.065 acre. Overall, these revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

## MR-7 WATER SUPPLY

In general, commenters expressed concern about the project's water demand given recent drought and water shortages throughout California. A commenter also claims that inaccurate water supply information is presented in the Draft EIR and the technical appendix (Draft EIR Appendix 11.10, *Utilities Correspondence*). The project proposes 349 new dwelling units (now reduced to 306 units) and is therefore not required to prepare a Water Supply Assessment (WSA) under the provisions of Senate Bill 610 and the State Water Code Sections 10610 to 10656, which sets a threshold for residential development of more than 500 dwelling units as the requirement for preparation of a WSA (refer to Draft EIR Section 5.13.2, *Regulatory Setting*). Based on the *Doheny Village – Water Supply Assessment*, dated March 2021, the South Coast Water District (SCWD) relies on a combination of imported water, local groundwater, and recycled water to meet its current and projected water needs. Upon building out Doheny Village the SCWD's water supply and demand projections demonstrates that the SCWD has a remaining water supply of 1,287 acre feet per year (AFY) for normal year, single-dry year, and multiple-dry year scenarios based on 2020 conditions, and 305 AFY through projected year 2040. As such, the project's maximum 142.8 gallons per month (GPM) average daily demand (ADD) (or 0.0053 AFY) (Draft EIR page 5.13-37) would be adequately supplied by SCWD. Further, as explained in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-36 and 5.13-37), the Applicant would be required to pay impact fees and/or exactions to offset project demands on existing public services and utilities, including water services. The Applicant would be required to work with the City to determine appropriate fees and exactions, which may be identified in a formal written agreement that is acceptable to both the City and Applicant. The Applicant, developer, and/or owner of the project would be required to pay its fair share of all applicable impact fees. As such, the Draft EIR has adequately analyzed the proposed project's potential water supply impacts and concludes that the project would have a less than significant impact relative to water supply.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. Among others, the revised project would reduce proposed dwelling units by 43 dwelling units from 349 to 306 units. The reduced unit count would proportionally reduce the project's overall water demand compared to that analyzed in the Draft EIR. These revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

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# Comment Letters from Agencies

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ORANGE COUNTY FIRE AUTHORITY
P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602-0125
Brian Fennessy, Fire Chief (714) 573-6000 www.ocfa.org

COMMENT LETTER A-1

February 27, 2023

Belinda Ann Deines, Principal Planner
City of Dana Point
Planning Division
33282 Golden Lantern
Dana Point, CA 92629
bdeines@danapoint.org

Subject: Draft Environmental Impact Report – Victoria Boulevard Apartments

Dear Belinda Ann Deines:

Thank you for the opportunity to review the subject document. The Orange County Fire Authority (OCFA) provides fire protection and emergency medical services response to 23 cities in Orange County and all unincorporated areas. The OCFA operates 78 fire stations throughout Orange County, one (1) within Dana Point, which includes the project area. Services include: structural fire protection, emergency medical and rescue services, education and hazardous material response. OCFA also participates in disaster planning as it relates to emergency operations, which includes high occupant areas and school sites and may participate in community disaster drills planned by others. Resources are deployed based upon a regional service delivery system, assigning personnel and equipment to emergency incidents without regard to jurisdictional boundaries. The equipment used by the department has the versatility to respond to both urban and wildland emergency conditions. The following are our comments:

A1-1

We believe this project will have Less Than Significant Impact with the following Measures:

- The project is subject to review by the City and the OCFA for various construction document plan checks for the applicable fire life safety codes and regulations. The project will be subject to the current editions of the California Building Code, California Fire Code, and related codes.
- Structures of this size and occupancy are required to have automatic fire sprinkler systems designed current Codes.
- Fire flow and public hydrant spacing shall meet the minimums identified in the codes.

- Fire department access shall be provided all around the new buildings.
- Fire lanes and emergency vehicle access roads shall be rated concrete or asphalt.
- It is unlawful to occupy any portions of this building until City building department and OCFA have conducted final inspection and sign off.
- As a condition of approval, the site developer shall be enter into a Secured Fire Protection Agreement with the Orange County Fire Authority. This Agreement shall specify the developer's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel.
- If this project is in a fuel modification zone, it is subject to review by OCFA
- If the project scope includes or requires the installation of traffic signals on public access ways, these improvements shall include the installation of optical signal preemption devices.
- Amenity roof decks will be treated as Assembly occupancies
- Code High Rise provisions will be applicable if the building is over 75'

A1-1
cont'd

In addition, we would like to point out that all standard conditions with regard to development, including water supply, built in fire protection systems, road grades and width, access, building materials, and the like will be applied to this project at the time of plan submittal. Thank you for providing us with this information. Please contact me at 714-573-6253 if you have any questions.

Sincerely,

Robert J Distaso PE
Fire Safety Engineer
Planning and Development
robertdistaso@ocfa.org
www.ocfa.org

## A1. RESPONSES TO COMMENTS FROM ORANGE COUNTY FIRE AUTHORITY, ROBERT J. DISTASO, FIRE SAFETY ENGINEER, FEBRUARY 27, 2023.

A1-1 The commenter introduces the Orange County Fire Authority (OCFA) and its responsibilities providing fire protection and emergency services in the County. The commenter also details several existing regulatory requirements the project would be required to comply with to ensure impacts to OCFA services would be less than significant. As discussed below, each of these measures have been either incorporated into the project plans or will be implemented through standard conditions of approval adopted by the City.

As discussed in Draft EIR Section 5.7, *Transportation* (page 5.7-17), project site plans would be subject to review by the City and OCFA to ensure that adequate emergency access and emergency response is provided and that the project complies with fire and emergency access standards and requirements. The project would comply with the current design standards outlined under the California Building Code, California Fire Code, and related codes, including code regulations related to fire sprinkler systems, fire flow, fire hydrant spacing, paving, traffic signals within public access ways, building height, and occupancy and assembly occupancy standards. The project's proposed fuel modifications zones are also subject to review and approval by OCFA. Per applicable regulations, no project building would be occupied until City building department and OCFA have conducted final inspection(s) and issued a certificate of occupancy.

As discussed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-30 through 5.13-32), the project would be required to comply with General Plan Land Use Element Policy 3.1 and pay the respective fire-related development fees and exactions to the City. Additionally, as a standard condition of approval, the project Applicant would be required to enter into a Secured Fire Protection Agreement with OCFA. The agreement would specify the Applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. As concluded by the Draft EIR, with compliance with the project plans, the City's standard conditions of approval, and existing regulations, impacts in this regard would be less than significant.

COMMENT LETTER A-2

BOARD OF DIRECTORS

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Donald P. Wagner
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Ryan Chamberlain
Governor's Ex-Officio Member

CHIEF EXECUTIVE OFFICE

Darrell E. Johnson
Chief Executive Officer

March 1, 2023

Ms. Belinda Ann Deines
City of Dana Point, Planning Division
33282 Golden Lantern
Dana Point, CA 92629
bdeines@danapoint.org

**Subject:** **Notice of Availability (NOA) of Draft Environmental Impact Report (EIR) Regarding Victoria Boulevard Apartments State Clearinghouse No. 2021070304**

Dear Ms. Deines:

Thank you for providing the Orange County Transportation Authority (OCTA) with the Notice of Availability for the Draft EIR Victoria Boulevard Apartments Project. The following comments are provided for your consideration:

- OCTA is working with the City of Dana Point and others to determine the feasibility of providing a Metrolink station within the vicinity of Dana Point and surrounding communities. Please consider this as part of EIR analysis, as appropriate.
- OCTA is working with Metrolink on the Serra Siding Extension Project which proposes to extend an existing siding track and replace a railroad bridge. Please consider this project as part of EIR analysis, as appropriate. A2-1
- In Section 5 Transportation, Subsection 5.7.4 “Impacts and Mitigation Measures” within “Transportation Facilities”, please remove references to Route 1 bus stops along Victoria Boulevard at the intersections of Via Santa Rosa and Sepulveda Avenue. There are no bus stops located here A2-2
- Please consider providing adequate bike racks for residents and consider how the potential increase in traffic from the addition of new residential units would impact the level of traffic stress on on-street bikeways. A2-3

Throughout the development of this project, we encourage communication with OCTA on any matters discussed herein. If you have any questions or comments, please contact me at (714) 560-5907 or at dphu@octa.net.

Sincerely,

Dan Phu
Manager, Environmental Programs

TC:dp

## A2. RESPONSES TO COMMENTS FROM ORANGE COUNTY TRANSPORTATION AUTHORITY, DAN PHU, ENVIRONMENTAL PROGRAMS MANAGER, MARCH 1, 2023.

A2-1 The Orange County Transportation Authority (OCTA) identifies its efforts to work with the City of Dana Point and others to determine the feasibility of providing a Metrolink station within the vicinity of Dana Point and surrounding communities, and asks that this be considered in the EIR analysis, as appropriate. As a general proposition, feasibility and planning studies are exempt from CEQA analysis per CEQA Guidelines Section 15262, which is consistent with the acknowledgment in CEQA Guidelines Section 15145 that where an impact is too speculative for evaluation, that conclusion should be noted and further analysis of the issue should be terminated. In this instance, OCTA and others are at the stage of discussing feasibility of a Metrolink station at an undetermined location "within the vicinity of Dana Point." As such, further analysis of that generalized concept would be premature.

OCTA separately identifies the Serra Siding Extension Project within the vicinity of Dana Point that should be considered in the EIR analysis. As discussed in Draft EIR Section 4.0, *Basis of Cumulative Analysis* (pages 4-1 through 4-6), Table 4-1, *Cumulative Projects List*, and Exhibit 4-1, *Cumulative Projects Map*, identify related projects in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. In accordance with *CEQA Guidelines* Section 15355, the list of cumulative projects was developed based on City of Dana Point and adjacent jurisdictions (Cities of San Juan Capistrano and San Clemente) reasonably foreseeable probable future projects as of the date of the Notice of Preparation (July 19, 2021). The implementation of each project represented in Draft EIR Table 4-1, *Cumulative Projects List*, was determined to be reasonably foreseeable. The Serra Siding OCTA/Metrolink project is included in the table, and considered as part of the cumulative analysis for each topical area in the Draft EIR.

A2-2 This comment requests the removal of references to Route 1 bus stops along Victoria Boulevard at the intersections of Via Santa Rosa and Sepulveda Avenue as there are no bus stops at these locations. This minor correction is made to Draft EIR Section 5.7.4, *Impacts and Mitigation Measures* (page 5.7-8) and is reflected below and in Section 3.0, *Errata*, of this Final EIR.

**Section 5.7.4, Impacts and Mitigation Measures**

**TRANSIT FACILITIES**

As stated above, the project area is currently served by OCTA Route 1 along Pacific Coast Highway/Camino Capistrano, as well as Route 91 along Pacific Coast Highway/Del Obispo Street. ~~Bus stops for Route 1 are located on Victoria Avenue at the intersections of Via Santa Rosa and Sepulveda Avenue.~~

These changes provide a minor update, correction, or clarification and do not represent "significant new information" that would require recirculation of the Draft EIR under CEQA Guidelines Section 15088.5.

A2-3 The commenter requests consideration of adequate bicycle racks for future residents and potential project impacts on on-street bikeways from added traffic. As discussed in Draft EIR Section 5.7, *Transportation* (page 5.7-8), the project would install bicycle storage facilities pursuant to the California Green (CALGreen) Building Code (California Code of Regulations, Title 24, Part 11). Additionally, the Specific Plan would allow for development of a Class III bicycle route along the project frontage of Victoria Boulevard in accordance with the *City of Dana Point Bicycle and Pedestrian Trails Master Plan*. The proposed project would also reconstruct the adjacent sidewalks along Sepulveda Avenue and Victoria Boulevard at a minimum width of 10 feet to allow for bicycle travel. Accordingly, if preferred, bicyclists could choose to travel on the sidewalk along Sepulveda Avenue and Victoria Boulevard during peak traffic hours. With these features integrated, the project would not cause any significant impacts to on-street bikeways from added traffic.

**DEPARTMENT OF TRANSPORTATION**
DISTRICT 12
1750 EAST FOURTH STREET, SUITE 100
SANTA ANA, CA 92705
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*Making Conservation a California Way of Life.*

COMMENT LETTER A-3

March 2, 2023

Ms. Belinda Deines
Principal Planner
City of Dana Point
33282 Golden Lantern
Dana Point, CA 92629

File: IGR/CEQA
SCH#: 2021070304
12-ORA-2021-02185
SR 1, PM 0.527
I-5, PM 6.894

Dear Ms. Deines,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Draft Environmental Impact Report (DEIR) for the Victoria Boulevard Apartments in the City of Dana Point. The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment.

The project involves the demolition of the existing Capistrano Unified School District (CUSD) bus yard and development of a 349-unit apartment complex with an attached six-story(seven-level) parking structure and associated amenities. Regional access to the project area is provided by State Route 1 (SR 1) and Interstate 5 (I-5). Caltrans is a commenting agency for this project and upon review, we have the following comments: A3-1

**Traffic Operations**

1. Caltrans Traffic Operations Southwest concurs with the traffic analysis. The report is consistent with the Governor's Office of Planning and Research (OPR) Technical Advisory and based on the Vehicle Miles Traveled (VMT) methodology, criteria, guidelines, thresholds, and results outlined in this DEIR. Therefore, Traffic Operations has no further comments at this time.

**Transportation Planning**

2. Caltrans encourages the City of Dana Point to provide a discussion on potentially improving multimodal transportation (walking, biking, and transit) opportunities for residents and visitors to address accessibility, safety, and environmental benefits. New development projects should also be encouraged to incorporate opportunities to support sustainable and multimodal transportation options, including, but not limited to, transit, walking, biking, shared and electric vehicles. A3-2

The improved multimodal connections to the project site can encourage residents/users to utilize alternative transportation options, thus reducing GHG emissions, congestion, and VMT. A3-2 cont'd

3. Caltrans supports the inclusion of bicycle storage facilities pursuant to CALGreen code. Caltrans also recommends following bicycle parking best practices described in the "Essentials of Bike Parking" guidance created by the Association of Pedestrian and Bicycle Professionals (link to online PDF: https://www.apbp.org/Publications).

   Bike parking should be installed a minimum of 24" away from walls and other objects (e.g. trash cans, plants, etc.). With the growing popularity of electric bikes and cargo/utility bikes (which tend to be bigger and heavier), Caltrans also recommends that bicycle storage facilities be designed to accommodate a range of bicycle styles, sizes, and weights.

4. For the Class III bike route on Victoria Boulevard, Caltrans recommends a combination of shared lane pavement markings (sharrows) and May Use Full Lane (R4-11) signage to most clearly convey to all road users that bicyclists may ride in the center of the travel lane. A3-3

5. Caltrans supports the City's evaluation of the Victoria Boulevard Apartments in Doheny Village as a potential opportunity site for affordable housing. The state mandates that cities must plan for housing needs of future residents of all incomes. This analysis would assist in accommodating the Regional Housing Needs Assessment (RHNA) allocation per the California Department of Housing & Community Development (HCD).

6. Please consider providing adequate wayfinding signage to nearby transit stops within the proposed project. Connectivity of first and last mile mobility options and transit services help integrate a complete multimodal transportation network.

7. Please consider encouraging or incentivizing the use of transit among both construction workers of the proposed development and future employees. Increasing multimodal transportation will lead to a reduction to congestion, Vehicle Miles Traveled, and improved air quality.

8. Please consider including a discussion on incorporating designated areas/parking for freight delivery, package, and transportation network company's pickup and drop-off. A3-4

9. Please consider providing electric charging stations in the project site. Electric charging infrastructure provides vehicles access to power without running their engines, thus reducing greenhouse and heat emissions. A3-5

In addition, the project would be preparing for the inevitable shift to alternative energy-fueled vehicles, per the Governor's Executive Order N-79-20, which phases out sales of gas-powered vehicles by 2035.

A3-5 (cont.)

**Encroachment Permit**

10. Any project work proposed in the vicinity of the State Right-of-Way (ROW) would require an encroachment permit and all environmental concerns must be adequately addressed. If the environmental documentation for the project does not meet Caltrans's requirements for work done within State ROW, additional documentation would be required before approval of the encroachment permit. Please coordinate with Caltrans to meet requirements for any work within or near State ROW. For specific details for Encroachment Permits procedure, please refer to the Caltrans's Encroachment Permits Manual at: http://www.dot.ca.gov/hq/traffops/developserv/permits/

A3-6

Please continue to keep us informed of this project and any future developments that could potentially impact State transportation facilities. If you have any questions or need to contact us, please do not hesitate to contact Joseph Jamoralin at (657) 328-6276 or Joseph.Jamoralin@dot.ca.gov

Sincerely,

SCOTT SHELLEY
Branch Chief, Regional-LDR-Transit Planning
District 12

## A3. RESPONSES TO COMMENTS FROM CALIFORNIA DEPARTMENT OF TRANSPORTATION, SCOTT SHELLEY, BRANCH CHIEF DISTRICT 12, MARCH 2, 2023.

A3-1 The commenter includes an introductory statement and concurrence with the transportation analysis in the Draft EIR.

A3-2 The commenter recommends the Draft EIR provide a discussion on potential multimodal transportation improvement and connection opportunities. As discussed in Draft EIR Sections 3.4, *Project Characteristics* (pages 3-8 through 3-13) and 5.7, *Transportation* (pages 5.7-8 through 5.7-9), the project supports a multi-modal transportation network and would provide and encourage alternative modes of transportation through the provision of various pedestrian, bicyclist, and transit opportunities. Pedestrian access and circulation would be provided throughout the residential community, connecting it to the network of City sidewalks. The project would also provide direct bicycle access to the proposed residential community via the project's secondary driveway along Victoria Boulevard. Additionally, as discussed in the Victoria Boulevard Specific Plan, a bike wash, maintenance, and storage amenity would be included on the building's ground floor, facilitating easy access between the City's cyclist network and development within the Specific Plan area. Bicycle storage facilities would be installed pursuant to the California Green (CALGreen) Building Code (California Code of Regulations, Title 24, Part 11), which, for projects with a minimum parking requirement of 50 or more parking stalls, allows up to eight percent of the required stalls to be provided as bicycle stalls in a properly secured and located rack. The project would allow for development of a Class III bicycle route along the project frontage of Victoria Boulevard in accordance with the *City of Dana Point Bicycle and Pedestrian Trails Master Plan*. The proposed project would also reconstruct the adjacent sidewalks along Sepulveda Avenue and Victoria Boulevard at a minimum width of 10 feet to allow for bicycle and pedestrian travel. The perimeter sidewalks would connect to the proposed pedestrian walkways that are interconnected throughout the proposed development, providing interconnectivity and internal pedestrian circulation within the multi-family housing community. Additionally, the project would include a boardwalk deck that would provide pedestrian connectivity between on-site amenities and structures. As such, these proposed project features were considered as part of the transportation impact analysis (Draft EIR Impact Statements TRA-1 and TRA-3.

Public Resources Code Section 21099 provides the criteria for determining the significance of transportation impacts relevant to vehicle miles traveled (VMT). There are three statutory goals that the significance criteria must promote: (1) reduction of GHG emissions; (2) development of multi-modal networks; and (3) a diversity of land uses. The Technical Advisory provides OPR's recommendations for quantitative thresholds of significance, which align with the State's three statutory goals. The recommended significance thresholds were developed from legislative mandates and state policies (i.e., AB 32, SB 375, SB 391 and a number of Executive Orders) that established quantitative GHG emissions reduction targets.

The Technical Advisory applies the thresholds for residential projects to either household (i.e., tour-based) VMT or home-based (i.e., trip-based) VMT assessments. It should be noted that the metric used to determine project VMT and the city-wide or regional VMT

must be consistent (i.e., "apples to apples" comparison). The Technical Advisory states that a fifteen percent (15 percent) reduction in VMT is achievable for development projects in a variety of place types and is consistent with SB 743's direction to OPR to select a threshold that aligns with the State's three statutory goals. Using the home-based VMT assessment, the Draft EIR Impact Statement TRA-2 found that the proposed residential community at the project site would result in less than significant VMT-related impacts.

While the proposed project would not provide any direct transit service, the project is located in an urban area with nearby commercial (retail) uses within walking distance. The existing transit system was designed to support planned growth in the City pursuant to the General Plan. Development of the proposed project would not affect the availability of existing transit services in the project area. The project would also comply with all applicable Title 24 and CALGreen building codes, which require electric vehicle (EV) charging stations and designated EV parking, further expanding mobility options.

Alternative modes of transportation and other air quality emission reduction strategies utilized by the project were included in the California Emission Estimator Model (CalEEMod), which was used to analyze project-related air quality and greenhouse gas emissions within Draft EIR Sections 5.8, *Air Quality*, and 5.9, *Greenhouse Gas Emissions*.

A3-3 The commenter provides recommendations regarding bicycle parking best practices, pavement markings/signage for shared bicycle facilities, transit wayfinding signage, and encouraging/incentivizing the use of multimodal transportation among construction workers and employees. Refer to response to Comment A3-2 for a discussion regarding publicly available multimodal transportation, bicycle and pedestrian routes, and transit access. Additionally, as discussed in the Victoria Boulevard Specific Plan, a bike wash, maintenance, and storage amenity would be included on the building's ground floor. Bicycle storage facilities would be installed pursuant to the California Green (CALGreen) Building Code (California Code of Regulations, Title 24, Part 11). The project would allow for development of a Class III bicycle route along the project frontage of Victoria Boulevard in accordance with the *City of Dana Point Bicycle and Pedestrian Trails Master Plan*. Pedestrian access and circulation would also be provided throughout the residential community, connecting the residential community to the network of City sidewalks. Wayfinding and street signage would be installed throughout the project site, and would be consistent with the design guidelines detailed in Section 4.6, *Signage Guidelines*, of the Specific Plan. As concluded in Draft EIR Section 5.7, *Transportation*, and 5.8, *Air Quality*, the project is anticipated to result in less than significant impacts to VMT and air quality. Last, the commenter acknowledges that the project provides affordable housing on-site, assisting the City with accommodating the Regional Housing Needs Assessment (RHNA) allocation per the California Department of Housing & Community Development (HCD).

A3-4 The commenter recommends the Draft EIR provide a discussion regarding incorporating delivery loading areas in the project. As discussed in Draft EIR Sections 3.4, *Project Characteristics* (page 3-12) and 5.11, *Noise* (page 5.11-25) the project includes areas to accommodate delivery loading and unloading, and, access to the loading area would occur from the Victoria Boulevard secondary access driveway at the northeastern corner of the project site and delivery loading and unloading activities would occur within the parking

garage. Also, it is acknowledged that pick-up/drop-off vehicles associated with alternative taxis services (such as Uber or Lyft) would occur along Victoria Boulevard, Sepulveda Avenue, or in the on-site parking garage.

A3-5 The comment requests the consideration of including electric charging stations on-site. As discussed in Draft EIR Sections 5.1, *Land Use and Relevant Planning* (page 5.1-32, Table 5.1-3, *SCAG 2020-2045 RTP/SCS Consistency Analysis*), 5.9, *Greenhouse Gas Emissions* (pages 5.9-18 through 5.9-19, and 5.9-21, Tables 5.9-2, *Consistency with the 2020-2045 RTP/SCS* and 5.9-3, *Consistency with the 2017 Scoping Plan Update*), and 5.10, *Energy* (page 5.10-12, Table 5.10-5, *Energy Plan and General Plan Project Consistency Analysis*) the proposed residential community would be required to comply with all applicable Title 24 and CALGreen building codes at the time of construction. These building codes would require EV charging stations and designated EV parking.

A3-6 The commenter states that any work proposed in the vicinity of State right-of-way would require an encroachment permit and environmental concerns would need to be addressed prior to receipt of an encroachment permit. As discussed in Draft EIR Section 3.7, *Permits and Approvals* (pages 3-23 through 3-24), the Applicant would be required to obtain an encroachment permit from Caltrans, a Responsible Agency, in accordance with the law for any such activities during construction. All requirements pursuant to the encroachment permit, if required, would be adhered to.

Further, it is acknowledged that projects or actions undertaken by a Lead Agency many times require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies, pursuant to CEQA Guidelines Sections 15381 and 15386, as amended. Per Draft EIR pages 3-23 and 3-24, Caltrans is specifically identified as a Responsible Agency for the purposes of the proposed project and, as such, may use this EIR in their decision-making process or for informational purposes (CEQA Guidelines Section 15096).

**CALIFORNIA COASTAL COMMISSION**
South Coast District Office
301 E. Ocean Blvd., Suite 300
Long Beach, CA 90802-4351
Voice (562) 590-5071
Fax (562) 590-5084

March 6, 2023

COMMENT LETTER A-4

Belinda Ann Deines, Principal Planner
City of Dana Point
Planning Division
33282 Golden Lantern
Dana Point, CA 92629

**Re: Victoria Boulevard Apartments Project**
**Draft Environmental Impact Report (EIR) (SCH# 2021070304)**

Dear Ms. Deines,

Thank you for the opportunity to review the Draft Environmental Impact Report for the Victoria Boulevard Apartments Project. According to the Draft Environmental Impact Report, the proposed project involves the demolition of the existing Capistrano Unified School District (CUSD) bus yard and development of a three- to five-story, 365-unit apartment complex with an attached six-story (seven level) parking structure and associated amenities in accordance with the proposed Victoria Boulevard Specific Plan. A General Plan Amendment and Zoning Change are anticipated to reflect the new land use designations and zoning district classifications.

The General Plan Amendment and Zoning Change require an amendment to the City's certified Local Coastal Program.

The following comments address the issue of the proposal's consistency with the Chapter 3 policies of the California Coastal Act of 1976. The comments contained herein are preliminary and those of Coastal Commission staff only and should not be construed as representing the opinion of the Coastal Commission itself. The comments are specific to the Draft Environmental Impact Report only.

A4-1

**AFFORDABLE HOUSING**

The proposed development includes an increase in the supply of affordable housing by mandating that no less than 5% of the units of the apartment development proposal be developed for very low income level housing, 5% of the units be developed for low income housing level housing, and 5% of the units be developed for moderate income housing. How was the numerical value of 5% determined? The Draft EIR mentions the City's Housing Element, but does not provide a thorough discussion or analysis of how the project's provision of affordable housing is consistent with the City's Housing Element. Thus, please provide that discussion and analysis. In addition, the language regarding affordable housing to be found in the specific plan was not thoroughly

discussed or analyzed. This is relevant to the Coastal Act as there may be possible impacts and/or opportunities to increase access to the coast for low-income populations, which are an environmental justice community considered by the Commission. Thus, please provide that discussion and analysis.

A4-1 (cont.)

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Victoria Boulevard Apartments Project. Commission staff request notification of any future activity associated with this site or related sites. Please note, the comments provided herein are preliminary in nature. Additional and more specific comments may be appropriate as it develops into final form and when an application is submitted for a Local Coastal Program Amendment. Please feel free to contact me at 562-590-5071 with any questions.

Sincerely,



Fernie Sy
Coastal Program Analyst II

## A4. RESPONSES TO COMMENTS FROM CALIFORNIA COASTAL COMMISSION, FERNIE SY, COASTAL PROGRAM ANALYST, MARCH 6, 2023.

A4-1 The commenter notes that because this site is within the City's coastal zone, the General Plan and Zoning Change will require a Local Coastal Program amendment which is referenced in the Project Description (Draft EIR page 3-20). The commenter requests additional background information and analysis be provided in the EIR regarding affordable housing; specifically, how the percentage of each income level for the affordable units was determined and how the project's provision of affordable housing is consistent with the City's Housing Element. The project site is owned by the Capistrano Unified School District (CUSD). The CUSD property is public land subject to the provisions of the Surplus Land Act, which requires at least 15 percent lower income units. Based on the Victoria Boulevard Specific Plan development density standards for the site (maximum of 63.3 dwelling units per acre on a 5.51-acre project site, yielding a maximum of 349 dwelling units) and the 15 percent affordable housing requirement, the project would yield no less than 53 affordable units. As discussed in Draft EIR Section 5.1, *Land Use and Relevant Planning* (page 5.1-6), according to SCAG's *6th Cycle Final RHNA Allocation Plan*, the City's fair share of the region's housing need for the 2021-2029 planning period is 530 units: 147 very low, 84 low, 101 moderate, and 198 above moderate income units. Draft EIR Table 5.1-1, *General Pan Consistency Analysis* (page 5.1-9 through 5.1-24), provides an analysis of the project's consistency with relevant General Plan policies including the Housing Element policies. The project would be consistent with the Housing Element affordable housing policy, Policy 1.1, as the project proposes a minimum of five percent very low-, five percent low-, and five percent moderate-income units of the overall unit count, providing equal spread of affordable housing options for each low income level. Thus, implementation of the project would result in increased access of lower income households to the coast.

Since circulation of the Draft EIR, the Applicant has proposed minor modifications to the project; refer to Section 2.0, *Revisions To Information Presented In The Draft EIR*. Specifically, although the percentage of affordable units in each income category have not changed, the reduction in overall units has resulted in a proportionate reduction in affordable units. The dwelling unit total was reduced by 43 dwelling units from 349 to 306 dwelling units. Thus, the affordable unit total was proportionately reduced by seven units from 53 to 46 affordable units. These revisions to the project do not change the conclusions presented in the Draft EIR. These modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. As a result, pursuant to CEQA Guidelines Section 15088.5, a recirculation of the Draft EIR is not required.

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# Comment Letters from Organizations

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**Mitchell M. Tsai**
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

**VIA E-MAIL**

February 27, 2023

Belinda Ann Deines
Principal Planner
City of Dana Point
33282 Golden Lantern
Dana Point, CA 92629
Em: bdeines@danapoint.org

RE: City of Dana Point's Victoria Apartments DEIR Comment Letter

Dear Belinda Ann Deines,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), our office is submitting these comments for the City of Dana Point's (the "**City**") Victoria Apartments project (the "Project").

The Southwest Carpenters is a labor union representing over 57,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning and in 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.

O1-1

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

The Southwest Carpenters incorporates by reference all comments raising issues regarding the DEIR (the "**DEIR**") submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191

(finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**") (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). Pub. Res. Codes §§ 21092.2, and 21167(f) and Gov't Code § 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. O1-1 cont'd

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

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, 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 a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note: O1-2

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

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

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board

and the University of California, Berkeley Center for Labor Research and Education concluded:

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

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

O1-2 cont'd

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to

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.[3]

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

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

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

O1-2 cont'd

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

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

O1-3

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[5]

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

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters 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 Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters 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.
- 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.

O1-3 cont'd

**Testing Procedures:**

SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- 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.
- 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.

O1-3
cont'd

**Planning**

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures

> for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site. O1-3 cont'd

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

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

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

## III. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT O1-4

[6] *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.

[7] For details concerning Southwest Carpenters' ICRA training program, *see* https://icrahealthcare.com/.

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). "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 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).

O1-4 cont'd

B. The City Should Prepare an EIR for the Project

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard, under which an agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v City of Encinitas* (1994) 29 CA4th 1597, 1602; *Friends of "B" St. v City of Hayward* (1980) 106 Cal.App.3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." Pub Res C §21151; *No Oil, Inc. v City of Los Angeles* (1974) 13 C3d 68, 75; *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 884. Under this test, if a proposed project is not exempt and *may* cause a significant effect on the environment, the lead agency *must* prepare an EIR. Pub Res C §§21100(a), 21151; 14 Cal Code Regs §15064(a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. *Parker Shattuck Neighbors v Berkeley City Council* (2013) 222 CA4th 768, 785. In such a situation, the agency must adopt a negative declaration. Pub Res C §21080(c)(1); 14 Cal Code Regs §§15063(b)(2), 15064(f)(3).

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." Pub Res C §21068; 14 Cal Code Regs §15382. See §13.2. A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. *No Oil, Inc. v City of Los Angeles,* 13 C3d at 83 n16; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. 14 Cal Code Regs §15063(b)(1). See *County Sanitation Dist. No. 2 v County of Kern* (2005) 127 CA4th 1544, 1580.

O1-4 cont'd

This standard sets a "low threshold" for preparation of an EIR. *Consolidated Irrig. Dist. v City of Selma* (2012) 204 CA4th 187, 207; *Nelson v County of Kern* (2010) 190 CA4th 252; *Pocket Protectors v City of Sacramento* (2004) 124 CA4th 903, 928; *Bowman v City of Berkeley* (2004) 122 CA4th 572, 580; *Citizen Action to Serve All Students v Thornley* (1990) 222 CA3d 748, 754; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 886; *Clews Land & Livestock v City of San Diego* (2017) 19 CA5th 161, 183; *Stanislaus Audubon Soc'y, Inc. v County of Stanislaus* (1995) 33 CA4th 144, 150; *Brentwood Ass'n for No Drilling, Inc. v City of Los Angeles* (1982) 134 CA3d 491; *Friends of "B" St. v City of Hayward* (1980) 106 CA3d 988. See also 14 Cal Code Regs §15064(f)(1).

As explained in full below, there is a fair argument that the Project will have a significant effect on the environment. As a result, the "low threshold" for preparation of an EIR has been met and the City must prepare an EIR.

O1-4 cont'd

C. CEQA Requires Revision and Recirculation of a Environmental Impact Report When Substantial Changes or New Information Comes to Light

To afford the public an opportunity to review and comment on an EIR, "[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 PRC § 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in accordance with PRC § 21092.1. CCR § 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)." CCR § 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.*

O1-5

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.

Based on the arguments set forth below, in the alternative, Commenter requests that the City recirculate the DEIR upon making any revisions. O1-5 cont'd

D. The DEIR Fails to Consider and Analyze all Feasible, Practical and Effective Mitigation Measures for Significant and Unavoidable Impacts

Although the DEIR recognizes various impacts to air quality, greenhouse gas emissions, noise, transportation and traffic as significant and unavoidable, it fails to consider all feasible, practical, and effective feasible mitigation measures under PRC §§ 21061, 21100(b)(3); see also *Napa Citizens for Honest Gov't v. Napa County Bd. Of Supervisors* (2001) 91 Ca.4th 1018, 1039.

The DEIR is required to review all feasible, practical, and effective mitigation measures as the DEIR concludes that the Project would have significant and unavoidable impacts to several domains identified in the DEIR. However, the DEIR fails to provide a feasibility analysis for mitigation measures that could conceivably reduce the Project's impacts to culture to less than significant levels. For example, the Project could adopt measures to mitigate noise rather than disrupt nearby sensitive receptors, or expand surrounding roads to increase ease of access and traffic. Without a feasibility analysis of more stringent mitigation measures, the DEIR fails as an informational document. O1-6

E. The DEIR Improperly Labels a Mitigation Measure as a "Project Design Feature."

The DEIR improperly labels a mitigation measure as a "Project Design Features" or "PDFs" which the DEIR purports to use in assessing regulatory requirements in the DEIR, and specifically for on-site electric vehicle charging stations in parking lots (DEIR pp. 5.10-9) to reduce potential environmental effects, and specifically for on-site electoral vehicle charging stations.

Relying on this PDF, the DEIR concludes that reduce the Project's impacts or at least its consistency with the Dana Point general plan and its reduction of fuel consumption and lower VMT (DEIR pp. 5.10-9-11). O1-7

However, it is established that "'[a]voidance, minimization and / or mitigation measure' . . . are not 'part of the project.' . . . compressing the analysis of impacts and mitigation measures into a single issue . . . disregards the requirements of CEQA." *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656.

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

By labeling mitigation measures as project design features, the City violates CEQA by failing to disclose "the analytic route that the agency took from the evidence to its findings." PRC § 21081.5; CEQA Guidelines § 15093; *Village Laguna of Laguna Beach, Inc. v. Board of Supervisors* (1982) 134 Cal.App.3d 1022, 1035 (*citing Topanga Assn for a Scenic Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515). O1-7 cont'd

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

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 DEIR must consider and resolve the conflict in the evidence. (See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109.) While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. (CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (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.) O1-8

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). O1-8 cont'd

1. *The DEIR Fails to Supports 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).

O1-9

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

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

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(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;

O1-9 cont'd

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

Second, it is not enough for an environmental document to conclude there is no significant GHG emissions impacts based upon a determination of consistency with a GHG Reduction Plan, without also making a determination based upon substantial evidence of the project's actual cumulative contributions to GHG emissions. In other words, a determination of consistency is only a starting point.[8] Compliance or non-compliance is merely one factor to be considered. The lead agency must explain how reliance on any particular plan or regulation addresses a potential impact.

Here, however, the DEIR identifies but fails to demonstrate consistency with various legislative plans, such as the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and general plan (DEIR p. 5.9-13, 17) that include the

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

above-listed requirements to be considered a qualified CAP or GHG Reduction Plan for the City. As such, the DEIR leaves an analytical gap showing that compliance with said plans can be used for a project-level significance determination for the Project. Second, the DEIR fails to explain how compliance with the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and the general plan leads to a less than significant impact, and specifically offsetting the increased GHG emissions due to increased traffic in connection with the construction of the apartments and the use of them indefinitely thereafter, nor does it acknowledge updates to these programs since the drafting of the DEIR. O1-9 cont'd

2. *The DEIR Fails to Demonstrate How Compliance or Consistency with Applicable Greenhouse Gas Reduction Plans Will Lead to a Less than Significant Impacts on Greenhouse Gas Emissions.*

Second, the DEIR fails to explain or analyze how compliance with the GHG Reduction Plan (DEIR p. 4.8-22), even if it qualified for a consistency evaluation, will lead to a less than significant impact. The lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable" (emphasis added).[9] O1-10

3. *The DEIR Fails to Evaluate Cumulative Project GHG Impacts.*

A DEIR must discuss cumulative impacts when they are significant and the project's incremental contribution is "cumulatively considerable." CEQA Guidelines §15130(a). A project's incremental contribution is cumulatively considerable if the incremental effects of the project are significant "when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." CEQA Guidelines §15065(a)(3). O1-11

Here, there is no evidence that the DEIR's Air Quality, Energy, Greenhouse Gas Emissions, and Health Risk Assessment Impact Analysis evaluated the Project's

[9] Natural Resources Agency (Nov. 2018) Final Statement of Reasons For Regulatory Action: Amendments To The State CEQA Guidelines ("2018 Final Statement of Reason"), p. 6, http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf;

cumulative project GHG emissions, although it is mentioned in reference to other plans (DEIR p. 5.9-23).

The DEIR needs to conduct a cumulative GHG impacts analysis, and if there is a potentially significant impact, impose adequate and all feasible measures.

O1-11 cont'd

4. *The DEIR Fails to Analyze Cumulative Project Air Quality Impacts.*

The DEIR indicates that there would be several air quality impact domains but none that result in potentially significant impacts and suggests mitigation would be implemented to attend to the development-specific air quality mitigation measures through compliance with the SCAQMD (DEIR p. 5.8-24, 25). This is inappropriate. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B); *see also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 [EIR failed to provide and commit to specific criteria or standard of performance for mitigating impacts to biological habitats]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management]. Implementing mitigation, even if project specific, cannot be deferred until after Project approval.

O1-12

The DEIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church (DEIR p. 5.8-21). However, the DEIR neglects, or appears to neglect the other sensitive receptors. Specifically, the Capo Beach Church, Nobis Preschool, Little Thinkers Montessori Academy, The Kid's Gym, and the residences to the south across the PCH. This is a critical omission because these businesses, churches, and schools for young children will likely be significantly impacted by the Project's permanent operations and air quality impacts such as the increased traffic due to the Project's implementation air quality impacts, and other uses and activities corresponding with the significant increase in patrons, residents, and other congestion and use compared to its current use that lasts only part of the year, and thus drastically impacting the air quality analysis conducted in the DEIR, especially given the traffic and parking garage use that will persist throughout all hours of the day if the project is approved and implemented, and notwithstanding the other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.8-21-22), and sustained residential and commercial activities. It appears the proposed Project's development would occur in one phase spanning the two to three years

(DEIR p. 3-21) and therefore it is exceedingly likely that the sensitive receptors would be also impacted by significant construction and permanent air quality impacts at some point in the proposed Project's development cycles in the short term for another two to three years due to construction, and indefinitely beyond that for sustained uses.

The DEIR also indicates that it would not exceed its NOx, CO, and PM emissions with respect to applicable regional thresholds of significance set by the South Coast AQMD (DEIR 5.8-21), but inappropriately limits the distance impact to 70-feet to only include the closest sensitive receptors, without also including the other sensitive receptors and analyzing their distances, even though they are further. This is inappropriate. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. Furthermore, this may create significant and unavoidable impacts that would cumulative contribute to nonattainment designations in the SCAQMD, contrary to the DEIR's suggestions (DEIR p. 5.8-19). Because of this, or that the Project would introduce significant and unavoidable impacts even with mitigation, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O1-12 cont'd

5. *The DEIR Fails to Adequately Disclose, Analyze the Project's Significant Noise Impacts.*

The DEIR conducts a thorough but oftentimes flawed noise analysis. Given that the Project proposes significant changes in the landscape from a public school commercial bus lot that is used only part of the year and at only certain times of day, to uses that will last all year and all times of the day, including improvements such as paved roads, parking, apartments, rooftop amenities, utility infrastructure, landscaping, water quality basis, signage, lighting, property walls, sidewalk improvements, a dog park, a large parking structure for the Project site, it is critical to conduct a thorough noise analysis, especially given the nearby sensitive receptors.

O1-13

The DEIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church (DEIR p. 5.11-18). However, the DEIR neglects, or appears to neglect the other sensitive receptors. Specifically, the Capo Beach Church, Nobis Preschool, Little Thinkers Montessori Academy, The Kid's Gym, and the residences to the south across the PCH. This is a critical omission because these businesses, churches, and schools for young children will likely be significantly impacted by the Project's permanent operations and noise impacts such as the parking structure activity, rooftop activity ambient noise, dog park noise, rooftop air conditioning units, parking lot vehicle movements, noise due to use on the newly-paved roads, significant increases in traffic and other ambient noise compared to its current uses as a public school bus storage facility accessed only limited times throughout the year, and stationary operational noise (DEIR p. 5.11-18-25), and thus drastically impacts the noise analysis conducted in the DEIR, especially given the automobile and parking usage that will persist throughout all hours of the day if the project is approved and implemented, and the nighttime construction and other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.11-18), which includes on estimated demolition and grading, paving, building construction and painting over 31 months, which would utilize heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, scrapers, and other equipment, during the hours of 7:00 am to 8:00 pm Monday through Saturday and only recognizes broader definitions of annoyance (human annoyance) which does not acknowledge to the specific impacts of this project to the nearest sensitive receptor (or other further sensitive receptors), over a nontrivial construction length (approximately 31 months). It appears the proposed Project's development would occur in phases spanning the next two to three years at a minimum (DEIR p. 3-21) and therefore it is exceedingly likely that the sensitive receptors both acknowledged and unacknowledged, including the residences north of Victoria and south of the PCH would be also impacted by significant construction and permanent noise impacts at some point in the proposed Project's development cycle and beyond.

O1-13 cont'd

The DEIR also leapfrogs impacts to these receptors by collapsing them to the closest residences to only those within 70 feet of the Project (DEIR p. 5.11-18), thereby minimizing the noise impacts to these areas.

The DEIR finds that the proposed Project would not result in a significant impact from traffic noise and indicates no feasible mitigation measures exist to reduce Project traffic noise impacts, even though it fails to analyze the other nearby sensitive receptors, including schools for small children and churches, and significant increases in noise levels beyond the current site uses, especially with the implementation of a nearly 700-space parking structure (DEIR p. 5.26, 28-31).

Because of this, or that the Project would likely introduce significant and potentially unavoidable impacts even with mitigation, and as suchthe City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements, and certainly not the latter. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O1-13 cont'd

6. *The DEIR Fails to Adequately Analyze Hazards and Hazardous Materials Impacts.*

The DEIR relies on the Leighton Consulting Inc. Phase I Environmental Site Assessment Report and the Limited Phase II Environmental Site Assessment, both from 2019 to assess the hazard and hazardous materials impacts (DEIR p. 5.6-1).

The DEIR also fails to note the proposed Project in or near existing in high and very high fire hazard severity zones, which is critical especially given that it is near undeveloped strips of land surrounding the site on all sides.

O1-14

However despite several considerations that are not addressed in the DEIR, it nonetheless concludes less than significant impacts for fire hazard (DEIR p. 8-9), no impact to emergency facilities, and does not recognize that the Project is located within 0.25 miles of an existing or planned school, or routine transport of hazardous materials. Each of these conclusions is reached without full assessment of relevant and significant factors to fully evaluate their impacts to the proposed project site and surrounding areas, especially with the recognition of two fuel dispenser islands, and prior pesticides and underground storage tanks on site (DEIR p. 5.6-3).

First, the DEIR indicates that its compliance with federal, state, and local regulations are sufficient to ensure proper handling of hazardous materials to and from the project site. However this does not attend to the specific design of the project. 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). With no tailored analysis to the transportation and use of hazards and hazardous materials to a project that is expected to last another two to three years (at least), and with continued commercial truck and other uses beyond that, it is insufficient to only rely on regulatory requirements and guidelines.

O1-14 cont'd

7. *The DEIR Fails to Adequately Analyze Significant Traffic and Transportation Impacts.*

As was mentioned in the prior analyses, the abundance of nearby sensitive receptors, the DEIR neglects, or appears to neglect the other sensitive receptors including an additional church, schools, and residences. Specifically, the DEIR cites to the OPR's 2018 indicating a 15% reduction in VMT consistent with SB 743, focusing on thresholds of significance for three types of developments: residential, office, and retail. The DEIR believes that it matches the residential proxy category. Specifically, "A proposed residential project exceeding a level of 15 percent below average existing regional (i.e., City of Dana Point) VMT per capita may indicate a significant transportation impact." (DEIR 5.7-6-10).

O1-15

The DEIR also used the CEQA Guidelines Appendix G checklist (a-d) for its assessment, and found that there was no mitigation required for less than significant impacts to (a) and (b) where (a) conflicts with a program plan, etc. and (b) conflicts with CEQA section 15064.3(b), and less than significant impacts with mitigation

incorporated to (c) and (d), where (c) increasing hazards due to a geometric design feature, or (d) impact emergency access. The DEIR offers vague assertions regarding compliance with existing policies for bicycle and pedestrian facilities, and does not provide any direct transit service. Also noteworthy is the presence of the adjacent Fire Station 29, and how it would very likely be impacted due to any road closures on Victoria due to construction. Yet the only mitigation proposed fails to acknowledge the fire station and only provides emergency access across the Project site on the opposite side of the station (DEIR 5.7-12). This is a critical omission because it impacts a fire station's ability to respond to emergencies, and especially when the construction is expected to last six days a week and nearly the entire day from the hours of 7:00 am to 8:00 pm. Furthermore, because these residences, churches, and schools are significantly closer to the proposed Project's permanent operations and transportation impacts such as the traffic impacts, and residential and parking activity and thus drastically impacts the traffic and transportation analyses conducted in the DEIR, especially given the residential and parking structure usage that will persist throughout all hours of the day if the project is approved and implemented, and the nighttime concrete pouring and other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.7-15), and sustained residential and parking activities would nonetheless result in significant an unavoidable impacts.

O1-15 cont'd

Furthermore, because the Project would introduce mitigation to reduce impacts to less than significant levels, (DEIR p. 5.7-16), this seems unlikely with the incomplete analysis performed above, and in reality impacts are likely to be significant even with mitigation incorporated. As such, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements, and certainly not the latter. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements. The DEIR also concludes that there is no means to quantify reductions that could result An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

8. *The DEIR Fails to Adequately Analyze Any Biological Impacts.*

When imposing mitigation, lead agencies must ensure there is a "nexus" and "rough proportionality" between the measure and the significant impacts of the project. CEQA Guidelines, § 15126.4, subd. (a)(4)(A); see *Nollan v. Cal. Coastal Commission* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374. All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies. CEQA Guidelines, § 15041. Formulation of mitigation measures shall not be deferred until some future time. CEQA Guidelines, § 15126.4, subd. (a)(B).

It is important to note the DEIR analyzes or makes no attempt to analyze ***any*** biological impacts. Given the Project site's size, there is a possibility, perhaps even a likelihood, that special status-plant or species exist on the Project site. Yet, with no analysis, it is impossible to determine if any federally, state, or locally protected plant or animal species are being disrupted. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. The City must reevaluate the possibility of special-status plant species in the area in light of these considerations.

O1-16

9. *The DEIR Fails to Supports its Land Use Analysis with Substantial Evidence.*

The DEIR claims consistency of its Land Use Analysis with the City's General Plan (DEIR p. 5.1-8-24). This is in error. Specifically, there is a conflict with Policy 2.1 which fails to adequately attend to the construction impacts to the surrounding land uses, and specifically as sensitive receptors. (DEIR 5.1-11). For policy 3.1, the Project fails to provide necessary public services, since it provides none. (DEIR 5.1-11). Similarly, Policy 3.6 fails to encourage patterns or development that minimizes air pollution or VMT, and instead increases these impacts due to the increased VMT usage from significantly more vehicles that will utilize the apartments and parking structure, compared to its current use as a storage facility for the school district (DEIR p. 5.1-11), nor does it promote bicycle and pedestrian access, since only one road will implement a bike lane and the only pedestrian access are pathways necessary to the project's construction that does nothing to increase access throughout the community as a whole (DEIR p. 5.1-12). And it fails to adequately attend to the hazards of the project, and is thus in violation of Policy 4.2 (DEIR 5.1-12). Policy 7.2 merely references other land use element policies without explaining how it is consistent (DEIR 5.1-13). This is inappropriate. Beyond that, it is clear that although the land use

O1-17

analysis is extensive, it is oftentimes riddled with inconsistences and lacks a full appreciation for the project's full impacts and intended spirit of the general plan. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

O1-17 cont'd

10. *The DEIR Fails to Support its Findings on Energy Impacts with Substantial Evidence.*

Pursuant to CEQA Guidelines, section 15126.2, subsection (b), analysis of a project's energy impacts "should include the project's energy use for all project phases (DEIR p. 4.13-29) and components, including transportation-related energy, during construction, and operation." Further, the Guidelines provide that "other relevant considerations may include . . . the project's size, location, orientation, equipment use, and any renewable energy features that could be incorporated into the project." Ibid.

Failing to undertake "an investigation into renewable energy options that might be available or appropriate for a project" violates CEQA. *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 213. Energy conservation under CEQA is defined as the "wise and efficient use of energy." CEQA Guidelines, appen. F, § I. The "wise and efficient use of energy" is achieved by "(1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy resources." *Ibid.*

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According to Appendix F of the CEQA Guidelines, an environmental document must consider and analyze:

1. The project's energy requirements and its energy use efficiencies;

2. The project's effects on local and regional energy supplies and on requirements for additional capacity;

3. The project's effects on peak-period and base-period energy demands;

4. The degree to which the project complies with existing energy standards;

5. The project's effects on energy resources; and,

6. The project's projected transportation energy use and its overall use of efficient transportation alternatives.

CEQA Guidelines, appen. F.

Basing a Project's energy impacts on its compliance with the California Building Energy Efficiency Standards does not constitute an adequate analysis of energy. *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264-65; see Cal. Code Regs., tit. 24, part 6. Similarly, the court in *City of Woodland* held unlawful an energy analysis that relied on compliance with Title 24, that failed to assess transportation energy impacts, and that failed to address renewable energy impacts. *City of Woodland*, *supra*, 225 Cal.App.4th at pp. 209-13.

First, the DEIR briefly mentions certain practices and equipment which the Project will engage to reduce energy consumption, though the details are vague and uncertain. For example, the DEIR suggests that construction contractors will comply with various federal and statute regulations and recommendations, but provides no specifics as to how that would be achieved (DEIR p. 5.10-8).

Second, in addressing long-term energy impacts during operation, the DEIR admits that the project would not directly require excessive long-term operational fuel consumption (DEIR p 5.10-9). It fails, though, to consider renewable energy uses and feasible conservation efforts beyond references that may or may not be implemented or adhering to state-mandated production requirements.

O1-18 cont'd

Third, the DEIR concludes that, with respect to operation-related fuel usage, energy impacts would be less than significant. It bases this conclusion on a cursory analysis of VMT and the contention that "the amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary." (DIER p. p. 5.10-12). That the Project would not cause or result in the need for additional measure of or justification for whether this Project will result in significant energy impacts or waste and inefficiency. This line of analysis is neither reasonable nor focused on energy use caused by the Project.

Without assessing the Project's use of energy activities in accordance with the CEQA Guidelines, the DEIR concludes that the Project will not result in wasteful, inefficient, or unnecessary energy use. Consequently, it must be recirculated after broadening its scope and incorporating details, in particular, expanded options for renewable energy solutions.

11. *The DEIR's Project Description Is Inadequate.*

The DEIR must be recirculated because it also lacks an adequate Project description. "[A]n accurate, stable and finite project description is the sine qua non of an

O1-19

informative and legally sufficient" environmental document. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 200. "A curtailed or distorted project description may stultify the objectives of the reporting process" as an accurate, stable, and finite project description is necessary to allow "affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance. *Ibid.* at pp. 192-93.

CEQA Guidelines, section 15124 requires a project describe in enough detail to allow for evaluation of its potential environmental impacts: (a) the project's precise location and boundaries; (b) a clearly written statement of objectives sought by the proposed project; (c) a description of the project's technical, economic, and environmental characteristics; and (d) a statement describing a list of agencies, permits, and approval which the project expects to use.

O1-19 cont'd

The DEIR's Project description does not satisfy this project description requirement by failing to clearly include a statement of objectives. (DEIR p. 1-3). Rather, the Project description merely provides some, but not all of the requirements of CEQA Guidelines *Ibid.* Furthermore, the DEIR provides no description of the Project's economic characteristics or clearly written statement and objectives. For these reasons too, the DEIR must be revised and recirculated.

12. *The Project and its CEQA Analysis Violate CEQA for Improper Piecemealing and Incorrect (Inflated) Baseline.*

Project has incrementally expanded over time and will likely continue to expand given its proposed phases, approximately two to three years, throughout the DEIR. Such expansion is suspect and in violation of CEQA's piecemealing prohibition. (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1208–1209 ["The requirements of CEQA cannot be avoided by piecemeal review which results from 'chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences.' (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284.")].) The danger of piecemealing is many-fold. First, it precludes consideration of impacts of the "whole of an action" under CEQA Guidelines § 15387, as has happened here. As explained by courts:

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> "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives...." (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at p. 1454, 263 Cal.Rptr. 340.) Here, the failure to consider the expansion of the wastewater treatment plant as part of the project under consideration resulted in an inaccurate project description and incomplete identification and analysis of the environmental effects of the development project (*Santiago County Water Dist. v. County of Orange, supra,* 118 Cal.App.3d at p. 829, 173 Cal.Rptr. 602.) As stated in **717 *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 166, 217 Cal.Rptr. 893, "[t]he danger of filing separate environmental documents for the same project is that consideration of the cumulative impact on the environment of the two halves of the project may not occur. This danger was here realized."
>
> Thus, because the FEIR did not "adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project," informed decision making was precluded. The FEIR is inadequate as a matter of law. (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at pp. 1454–1455, 263 Cal.Rptr. 340.) The certification by the Board of the FEIR as complete and adequate constituted an abuse of discretion. (*County of Inyo v. City of Los Angeles, supra,* 71 Cal.App.3d at p. 200, 139 Cal.Rptr. 396.)

(*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 734–735.)

O1-20 cont'd

Second, piecemealing *alters* the accurate baseline of the CEQA analysis. Thus, under CEQA, the baseline environmental conditions (to measure the Project's impacts against) must be set as early as possible when the Project's environmental review begins. (CEQA Guidelines § 15125(a)(1).) Here, the environmental review of the project began at least in 2019, and likely earlier, given the surveys conducted. Therefore the Project's baseline or existing environmental conditions for purposes of CEQA review must go back to the year of 2019 and measure the Project's proposed changes – regardless of when they were proposed (in 2019 or later) – against that lower 2019 baseline. However, as evident from the DEIR, the applicant is not measuring the

Project's impacts "as a whole" or as of 2019 and its iterations through 2027 and beyond, but rather focuses on the impacts of the proposed *changes* after the 2019 and 2023 approvals. As such, the Applicant is seeking to alter/inflate the baseline and thereby understate the Project's impacts.

Further, for CEQA purposes, the fact that a project is entitled or is warranted under the general plan is not relevant for the baseline. (CEQA Guidelines § 15125(a)(3) ["An existing conditions baseline shall not include hypothetical conditions such as those that might be allowed, but have never actually occurred under existing permits or plans as the baseline."])

Stated otherwise, the Applicant is trying to use various 2019 baselines and surveys instead more updated or recent baselines post-covid, and thereby *inflates* the baseline through its 2019 approvals and other changes in the surrounding area, in order to minimize and understate the changes it proposes. This is the classic case of trying to *end run* CEQA, where courts agree a *different* baseline must be used. "Of course, were there evidence of an attempted end run around CEQA, use of a different baseline may well be appropriate." (*Hollywoodians Encouraging Rental Opportunities v. City of Los Angeles* (2019) 37 Cal.App.5th 768, 781, fn. 11.) (*See also*, *POET, LLC v. State Air Resources Bd* (2017) 12 Cal.App.5th 52, 83 [use of an inflated baseline had the effect of understating the increase of impacts, requiring reversal]; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953 (*"County of Amador"*) [without an accurate baseline, the "analysis of impacts, mitigation measures and project alternatives becomes impossible."])

O1-20 cont'd

Furthermore, an accurate, stable, and finite project description must be the *bona fide* subject of an EIR, An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR; the defined project and not some different project must be the EIR's bona fide subject. (*Mira Monte Homeowners Assn. v. County of Ventura* (1985) 165 Cal.App.3d 357, 365 [212 Cal.Rptr. 127].) "CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." (Id., at p. 366, internal quotation marks omitted.) (*Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592, emph. added.)

The Project appears to have manifestly piecemealed the Project by initially proposing a smaller scale project for approval now and will likely incrementally increasing the scale and intensity of the Project. The Project represents a classic case of piecemealing where the same applicant fails to accurately disclose the full scope of the project during the initial environmental review and incrementally increases the project after the initial environmental document is approved, in order to avoid analyzing the impacts of the "whole of the action" as CEQA requires. That is what CEQA prohibits and to which the case law is clear. (*Arviv Enterprises, Inc. v. South Valley Area Planning Com.* (2002) 101 Cal.App.4th 1333, 1348–1351 [requiring an EIR for the whole of an action, including *permitted* and even *built out* single family homes and rejecting the applicant's argument about *vested rights,* "Compliance with these existing laws was thus required notwithstanding the City's failures and/or Arviv's misleading project descriptions which may have prevented the City from appreciating the full scope of the proposed development." *Id.* at 1350.])

O1-20 cont'd

## IV. 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

A DEIR must identify, fully analyze and mitigate any inconsistencies between a proposed project and the general, specific, regional, and other plans that apply to the project. CEQA Guidelines § 15125(d); *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1566; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 881. There does not need to be a direct conflict to trigger this requirement; even if a project is "incompatible" with the "goals and policies" of a land use plan, the IS/MND must assess the divergence between the project and the plan, and mitigate any adverse effects of the inconsistencies. *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 378-79; *see also Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903 (holding under CEQA that a significant impact exists where project conflicts with local land use policies); *Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (held county development and infrastructure improvements must be consistent with adopted general plans) (citing Gov. Code 65302).

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### B. The Proposed Land Use Amendments and Entitlements Conflict with SB 375 and SCAG's 2020 Regional Transportation Plan and Sustainable Communities Strategy

O1-22

In 2008, Senate Bill 375 amended CEQA and empowered metropolitan planning organizations (MPOs) to enact regional plans to reduce GHG emissions from passenger vehicles. MPOs are required to prepare regional transportation plans (RTP) and sustainable community strategies (SCS) in an effort to meet CARB's GHG reduction goals under SB 375. Gov. Code § 65080(b)(2)(B). SB 375 specifically targets GHG emissions from passenger vehicles by linking land use decisions to transportation planning. *Id.* If the regional SCS/RTP plan does not achieve CARB's GHG reduction targets, then the MPO is required to create an alternative planning strategy (APS) that shows how the targets can be achieved through other mechanism such as alternative development patterns, infrastructure decisions, or other alternative transportation measures or policies that can still achieve CARB's reduction targets. Gov. Code § 65080(b)(2)(I).

For this Project, the applicable plan is SCAG's 2020-2045 RTP/SCS plan adopted on September 3, 2020.

O1-22 cont'd

The DEIR fails to analyze the Project's consistency with SCAG's 2020-2045 RTP/SCS plan given the many unverified and unanalyzed transportation impacts and the strong likelihood of increases to VMT rather than decreases due to the Project's development on land that consists mostly of parking spaces which will be replaced with substantial residential, commercial, and hotel uses, as well as no indication of transit discounts or improvements to accessibility to the Amtrak commuters during construction or how it impacts their commute or use after the Project's completion, or how the Project's significant patronage, resident, and hotel occupant increases would affect demand on the surrounding area and transportation networks. For example, SCAG's 2020 RTP/SCS requires or suggests the following that the Project fails to consider or adopt in the DEIR:

- Land Use Policies: pursuing affordable housing or providing more transportation options for short trips;[10]
- Transportation Network Strategies: providing transit fare discounts; providing transit integration strategies such as integration of active transportation and transit by improving pedestrian access and bicyclist access;[11]

[10] SCAG (Sep. 2020) 2020 RTP/SCS, pp. 25-36.
[11] *Id.*

- Transportation Demand Management Strategies: encourage use and implementation of TDM strategies such as rideshare incentives, parking management, parking subsidies for carpoolers, incentives for telecommuting, integrated mobility hubs, or additional investments in active transportation infrastructure;[12] and
- Clean Vehicle Technology Strategies: use of neighborhood electric vehicles (NEVs), and anticipating shared mobility platforms, car-to-car communication or automated vehicle technologies.[13]

O1-22 cont'd

The DEIR fails to demonstrate consistency with the most recent SCAG 2020-2045 RTP / SCS Plan and should be revised to meet its goals and policies.

## V. CONCLUSION

Based on the foregoing, we respectfully request the City deny the Project, its DEIR, and order the applicant to revise the Project to ensure its consistency with all applicable laws and regulations as detailed above, as well as to study the "whole of the action" and use the accurate *bona fide* project description and baseline for purposes of CEQA review. "CEAQ contemplates *serious* and not superficial or pro forma consideration of the potential environmental consequences of a project. *Leonoff v. Monterey County Bd. Of Supervisors* (1990) 222 Cal.App.3d 1337, 1347, 272 Cal.Rptr. 372; emphasis added; *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 593, fn. 3.

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If the City has any questions or concerns please do not hesitate to contact our office.

Sincerely,

Jason A. Cohen, Esq.
Attorneys for Southwest Regional Council of Carpenters

[12] *Id.*
[13] *Id.*

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); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

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**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
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**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

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

## Worker Trips and Greenhouse Gas Calculations

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

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

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

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.

## 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.

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

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

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

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

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

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

## Practical Application of a Local Hire Requirement and Associated Impact

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

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 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.

[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.

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

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

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

| 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** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 2.1 Overall Construction

### Mitigated Construction

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

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

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

## 2.2 Overall Operational

### Mitigated Operational

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

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

## 3.0 Construction Detail

### Construction Phase

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

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2023

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 2023

### Unmitigated Construction On-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

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

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

### 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

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

## 6.2 Area by SubCategory

**Mitigated**

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

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

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

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

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

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

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

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

## 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 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

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

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 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 | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

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

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

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

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 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 | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

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

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

## 2.2 Overall Operational

**Mitigated Operational**

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

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

## 3.0 Construction Detail

**Construction Phase**

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

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

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

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction On-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

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

## 6.2 Area by SubCategory

**Mitigated**

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

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

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

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

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

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

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

### 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

Attachment C

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

**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.

## 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

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**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.

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**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.

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.

**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.

**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 Conferenc*e. 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.

**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

## 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

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

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

**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

**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.

- 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 public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**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.

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.

**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.

**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.

## O1. RESPONSES TO COMMENTS FROM SOUTHWEST MOUNTAIN STATES REGIONAL COUNCIL OF CARPENTERS, JASON A. COHEN, ESQ, FEBRUARY 27, 2023.

O1-1 This initial comment introduces the Southwest Mountain States Regional Council of Carpenters (Southwest Carpenters). The commenter states that the Southwest Carpenters reserves the right to supplement these comments at or before hearings on the project, incorporates by reference all comments raising issues regarding the Draft EIR, and requests notification of all future notices issued under CEQA regarding the project. This comment is acknowledged, and the City will send all future CEQA notices regarding the proposed project to the Southwest Carpenters.

O1-2 The commenter requests the City require the project to utilize local hire and use of a skilled and trained workforce to build the proposed development. The commenter states that local hire and skilled and trained workforce can provide community benefits such as helping reduce environmental impacts associated with worker/vendor trips and vehicular emissions, and provide local economic benefits (i.e., short-term construction jobs for local workers). The commenter also provides examples of other jurisdictions that have tied local hire and other workforce policies to local development permits to address transportation issues (e.g., City of Berkeley). Lastly, the commenter states that requiring a skilled and trained workforce would generally help the City mitigate greenhouse gas, air quality, and transportation impacts. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while this comment regarding the labor force does not pertain to an environmental impact addressed in the Draft EIR; the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

O1-3 The commenter raises concerns regarding the COVID-19 pandemic and the potential for project-related construction activities to create a public health risk for construction workers. The commenter recommends the City incorporate additional requirements to mitigate public health risks from the project's construction activities. The commenter provides potential mitigation, including safe construction site design, testing procedures, response plans, and worker safety training to reduce COVID-19 risk.

The City recognizes the unprecedented nature of COVID-19 and the potential public health impacts associated with it. Any projects being constructed during a period of time in which emergency measures or orders are in place would be required to adhere to the Center for Disease Control and Prevention's (CDC) workplace guidelines for construction workers, including the Construction COVID-19 Checklist for Employers and Employees. Adherence to these measures would ensure that potential health impacts during the period of time in which emergency measures or orders are in place would be minimized during construction. Furthermore, any projects being developed are required to adhere to the City of Dana Point and County of Orange workplace guidelines at the time of groundbreaking.

This comment is noted and will be presented to the decision makers for their review and consideration.

O1-4 The commenter provides a general background on CEQA and the purpose of EIRs. The comment concludes that an EIR should be prepared for the proposed project, which is the CEQA document that was prepared by the City and to which these comments were made. This comment does not raise any specific environmental issue or information addressed or contained in the Draft EIR. Therefore, no further response is necessary.

O1-5 The commenter provides background information regarding when an EIR is required to be revised and recirculated for public review under CEQA and refers to the remainder of the comment letter as arguments supporting the requested recirculation of the EIR. This comment is acknowledged, and no further response is necessary. Refer to response to Comments O1-6 through O1-22 for specific responses to such arguments.

O1-6 The commenter claims that the Draft EIR identifies various impacts to air quality, greenhouse gas emissions, noise, and transportation and traffic as significant and unavoidable and fails to consider all feasible, practical, and effective mitigation measures to reduce such impacts. The commenter is incorrect; the Draft EIR concludes that no significant and unavoidable impacts would occur upon implementation of existing regulatory requirements and recommended mitigation measures. Requiring additional mitigation measures is not necessary as all impacts have been reduced to less than significant levels on the basis of the substantial evidence set forth in the Draft EIR.

O1-7 The commenter states that the Draft EIR improperly identifies the project's proposed installation of on-site electric vehicle charging stations as a 'project design feature' rather than a 'mitigation measure.' The commenter claims that the project design feature (PDF) is not enforceable like a mitigation measure is under CEQA since it would not be included in the project's Mitigation Monitoring and Reporting Program and thus is improperly utilized to reduce the project's impacts. Installation of on-site electric vehicle charging stations is required to comply with existing CALGreen Code requirements and would be enforced by the City's Building Official during plan check and final inspections. Therefore, installation of on-site electric vehicle charging stations is already required under existing regulatory requirements and is not a project-specific mitigation measure utilized to reduce project impacts. As this is an existing regulatory requirement, additional mitigation measures are not required.

O1-8 The commenter generally states that substantial evidence is required to support findings made in EIRs but does not identify a specific environmental issue or information addressed or contained in the Draft EIR. Draft EIR Section 5.0, *Environmental Analysis*, contains a detailed environmental analysis of the existing conditions, existing regulatory setting, potential project impacts, potential cumulative impacts, and recommended mitigation measures. The findings presented in the Draft EIR are supported by substantial evidence, as cited throughout the EIR, provided in Draft EIR Section 10.0, *Bibliography*, and appended to the Draft EIR (Appendices 11.1 and 11.3 through 11.11).

Contrary to the commenter's assertion, the Draft EIR does not rely on regulatory compliance alone to mitigate potentially significant impacts from the project. Rather, the

Draft EIR acknowledges and accounts for the fact that many existing federal, State, and local laws and regulations reduce environmental impacts. Such laws and regulations are discussed, as relevant, in the Draft EIR. If impacts remain potentially significant after implementation of existing laws and regulations, reasonable/feasible mitigation measures are then recommended to reduce such impacts to the extent feasible. Such mitigation measures are documented throughout Draft EIR Section 5.0, *Environmental Analysis*.

O1-9 The commenter states the Draft EIR fails to support its findings on greenhouse gas (GHG) impacts with substantial evidence because Draft EIR Section 5.9, *Greenhouse Gas Emissions*, relies on consistency with a GHG Reduction Plan to conclude no significant GHG emissions impacts.

As stated in Section 5.9.3, *Impact Thresholds and Significance Criteria* of the Draft EIR (page 5.9-12 through 5.9-13), the City has not adopted a numerical significance threshold for assessing impacts related to GHG emissions, nor have the South Coast Air Quality Management District (SCAQMD), California Air Resources Board's (CARB), or any other State or regional agency adopted a numerical significance threshold for assessing GHG emissions that is applicable to the project. Since there is no applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the project's impacts related to GHG emissions focuses on its consistency with Statewide, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the primary basis for determining the significance of the project's GHG-related impacts on the environment. Refer also to responses to Comments O1-10 through O1-12 for additional information.

O1-10 The commenter states the Draft EIR fails to demonstrate how compliance or consistency with applicable greenhouse gas reduction plans will lead to a less than significant impacts on greenhouse gas emissions. The project's GHG impacts are evaluated by assessing the project's consistency with applicable local, regional, and Statewide GHG reduction plans and strategies. These plans were developed to help the City, the region, and the State to achieve GHG reduction targets. By showing consistency with these plans, the project demonstrates its fair-share contribution to GHG reductions needed to achieve the targets. Therefore, because the project would be consistent with applicable GHG reduction plans, the project's GHG impacts would be less than significant.

O1-11 The commenter states the Draft EIR fails to evaluate cumulative project GHG impacts with regards to air quality, energy, GHG emissions, or health risk. Cumulative GHG impacts are evaluated in Draft EIR Section 5.9.5, *Cumulative Impacts* (page 5.9-23). Project-related GHG emissions are not confined to a particular air basin; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentrations of GHG emissions. GHG impacts are recognized as exclusively cumulative impacts, and there are no non-cumulative GHG emission impacts from a climate change perspective. As such, significant direct impacts associated with the proposed project also serve as the project's cumulative impact. As analyzed in the Draft EIR, the proposed project would be consistent with applicable measures in the 2020-2045 RTP/SCS, CARB's Scoping Plan, and the City's General Plan and Energy Plan and the project's GHG emissions impacts would be considered less than significant. Thus, the

project would not significantly cumulatively contribute to GHG impacts and impacts in this regard would be less than significant.

O1-12 The commenter states the Draft EIR fails to evaluate cumulative project air quality impacts and includes several comments about the air quality analysis (some of which are not related to the cumulative impacts analysis). The SCAQMD neither recommends quantified analyses of cumulative construction emissions, nor provides separate methodologies or thresholds of significance to be used to assess cumulative construction impacts. As discussed in Section 5.8.3, *Impact Thresholds and Significance Criteria*, of the Draft EIR (page 5.8-9 through 5.8-10), the SCAQMD significance thresholds for construction are intended to meet the objectives of SCAQMD's *2022 Air Quality Management Plan* (AQMP) to ensure the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are not exceeded.

In the first paragraph of this comment, the commenter raises concerns about the deferral of mitigation measures. The project does not have any significant air quality impacts requiring mitigation; the reference in the text is to related projects considered in the cumulative analysis, the direct impacts of which would be considered separately and mitigation recommended, if required. This does not equate to a deferral of mitigation. The, the project Applicant has no control over the timing or sequencing of cumulative projects in the project vicinity, any quantitative analysis to ascertain the daily construction emissions that assumes multiple, concurrent construction would be speculative. Future cumulative projects would also be required to analyze construction emission impacts on a project-level under CEQA and implement mitigation as needed. Therefore, the project would not result in significant cumulatively considerable impacts with regards to short-term construction air quality emissions and the obligation of those related projects to identify mitigation, if significant impacts are identified, is not improper deferral of mitigation.

To assess the project's cumulative operational air quality impacts, the SCAQMD has set forth both a methodological framework as well as significance thresholds. The SCAQMD's approach for assessing cumulative impacts is based on the SCAQMD's 2022 AQMP forecasts of attainment of NAAQS in accordance with the requirements of the Federal and State Clean Air Acts. Therefore, cumulative operational impacts associated with the implementation of the project would be less than significant as the project is consistent with the growth assumptions upon which the SCAQMD's 2022 AQMP.

The commenter also questions the sensitive receptors that were analyzed in the Draft EIR. The Draft EIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church. As stated in the Draft EIR, the closest sensitive receptors are residential (i.e., along Victoria Boulevard) and institutional (i.e., Orange County Fire Station No. 29, San Felipe De Jesus Catholic Church) uses located approximately 70 feet to the north and west of the project site. Other sensitive receptors in the study area are at greater distances than those identified above, and would experience lower air impacts, due to additional particle dispersion from a distance and the shielding of intervening structures. Thus, the Draft EIR considers potential construction and operational air quality impacts to all sensitive

receptors in the project area and fully discloses the project's less than significant air quality emissions; no significant and unavoidable impacts would result.

O1-13 The commenter states the Draft EIR fails to adequately disclose and analyze the project's significant noise impacts. The Draft EIR acknowledges the change in land use compared to the existing conditions as a result of the proposed project. The Draft EIR also evaluates the operational noise impacts from the proposed project's stationary noise sources including the mechanical equipment, slow moving trucks, the dog park area, parking activities, and outdoor gathering areas and concludes that the proposed project's activities would not permanently increase the existing ambient noise levels. The Draft EIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church. As stated in the Draft EIR, the closest sensitive receptors are residential (i.e., along Victoria Boulevard) and institutional (i.e., Orange County Fire Station No. 29, San Felipe De Jesus Catholic Church) uses located approximately 70 feet to the north and west of the project site. The Draft EIR evaluates noise impacts to the nearest sensitive receptor at 70 feet as other sensitive receptors in the study area are at greater distances than those identified above, and would experience lower noise impacts, as noise levels are atmospherically attenuated by a factor of 6 dBA per doubling of distance.

The Draft EIR acknowledges that pursuant to Municipal Code Section 11.10.014, *Special Provisions*, noise associated with construction activities are exempt from other provisions of the Municipal Code (including the City's interior and exterior noise standards as provided in Municipal Code Chapter 11.10, *Noise Control*), provided that construction would be prohibited between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, and/or any time on Sunday or a Federal holiday. The project construction activities would comply with these standards and thus, noise associated with the proposed project construction would be exempt from the City's interior and exterior noise standards.

Furthermore, in order to further reduce construction noise levels during project construction, the project would implement the City's standard condition of approval in regard to construction noise. Implementation of this standard conditions of approval would require all construction equipment to be equipped with properly operating and maintained mufflers. As such, short-term construction noise impacts would be considered less than significant in this regard.

The commenter also states that the Draft EIR fails to analyze operational traffic noise impacts on other nearby sensitive receptors. As analyzed in Section 5.11-21, *Noise*, of the Draft EIR (page 5.11-21 through 5.11-24), noise modeling of mobile sources (i.e., vehicles) on nearby roadway segments identified that the increase in ambient noise generated by project trips would not exceed the established thresholds. Overall, the project would not result in long-term operational noise impacts that could affect sensitive receptors, and all impacts, construction and operational, have been fully addressed. No significant and unavoidable impacts would occur with regards to noise.

O1-14 The commenter confirms that Draft EIR Section 5.6, *Hazards and Hazardous Materials*, relies on two environmental site assessment reports prepared by Leighton Consulting Inc.

The commenter asserts that the Draft EIR fails to acknowledge the project site is located in or near existing high and very high fire hazard severity zones (VHFHSZ). However, potential fire hazards are evaluated in Draft EIR Section 8.0, *Effects Found Not To Be Significant* (page 8-9 through 8-10), under the response to Wildfire. Specifically, according to the California Department of Forestry and Fire's *Orange County Very High Fire Hazard Severity Zones in SRA*, the City is not located in or near a State Responsibility Area (SRA). Further, according to the California Department of Forestry and Fire's *Orange County Very High Fire Hazard Severity Zones in SRA*, the nearest VHFHSZ area is situated greater than 0.5-mile east, in the cities of San Juan Capistrano and San Clemente. As such, the project site and immediate vicinity are not classified as a VHFHSZ, and no impact would occur in this regard. Nonetheless, the Draft EIR summarizes various fire suppression features (e.g., fuel modification zones, fire lane access, fire defensible landscaping, setbacks, and irrigation) that the project would implement at the recommendation of the Orange County Fire Authority. Thus, the Draft EIR fully evaluates potential fire hazard and emergency access impacts associated with the proposed development.

The commenter also states that the Draft EIR does not recognize that the project site is located within 0.25-mile of an existing or planned school. This is incorrect; Impact Statement HAZ-2 of Draft EIR Section 5.6, *Hazards and Hazardous Materials* (page 5.6-26 through 5.6-27), evaluates the project's potential hazardous impacts to nearby schools and concludes that the project would not have a significant impact to nearby schools.

Additionally, the commenter generally states that the conclusions in Draft EIR Section 5.6, *Hazards and Hazardous Materials*, rely solely on project compliance with regulatory requirements to conclude less than significant impacts. The commenter is incorrect. The impact analyses in Draft EIR Section 5.6, *Hazards and Hazardous Materials*, summarizes existing and historical hazards and hazardous materials on- and off-site and concludes that the project would be required to implement Mitigation Measures HAZ-1 through HAZ-7, in addition to compliance with existing regulatory requirements, to reduce project impacts to less than significant levels in this regard. The Draft EIR also analyzes the proposed project's use/transport of hazardous materials and concludes that it would not pose a significant impact during construction as any materials uses would be typical of urban residential construction projects. Thus, the Draft EIR does not solely rely on regulatory requirements and guidelines.

O1-15 The commenter claims that the Draft EIR fails to adequately analyze the project's transportation impacts and provides a summary of the Draft EIR's conclusions regarding CEQA Guidelines Appendix G checklist thresholds (a) through (d). The commenter also reiterates that there are many nearby sensitive receptors to the project site.

More specifically, the commenter states that the Draft EIR offers vague assertions regarding compliance with existing policies for bicycle and pedestrian facilities and that the project does not provide any direct transit service. It is unclear what assertions the commenter is referencing. Draft EIR Section 5.7, *Transportation* (page 5.7-8 through 5.7-9), Impact Statement TRA-1 evaluates the project's impacts on transit, bicycle, and pedestrian facilities. Relevant programs, plans, and/or policies related to transit, bicycle, and pedestrian facilities (e.g., the General Plan, Municipal Code, and *City of Dana Point*

*Bicycle and Pedestrian Trail Master Plan*) are referenced and the project is evaluated to identify any potential conflicts. Additionally, while the project does not provide any direct transit service to existing transit lines, this does not directly result in a potentially significant impact under CEQA.

The commenter also raises concerns regarding potential impacts on Orange County Fire Authority (OCFA) Fire Station 29 services due to potential project-related road closures on Victoria Boulevard during project construction. However, as analyzed under Impact Statements TRA-3 and TRA-4 of Draft EIR Section 5.7, *Transportation* (page 5.7-12 through 5.7-17), potential impacts from temporary closures of vehicle lanes, bicycle lanes, and/or sidewalks from construction activities would be mitigated by Mitigation Measure TRA-1. Mitigation Measure TRA-1 would require the Applicant (Developer) to coordinate with the Director of Public Works regarding timing and duration of proposed temporary partial lane and/or sidewalk closures to ensure the closures would not impact operations of adjacent uses or emergency access. In addition, Mitigation Measure TRA-1 would ensure traffic signs, traffic cone arrangements, and flaggers are present during general drop-off and pick-up hours for nearby schools (i.e., Nobis Preschool, San Clemente Christian School) to ensure safe pedestrian access along the project frontage for students. Further, as stated in the Draft EIR, project site plans would be subject to review by the City and OCFA to ensure that adequate emergency access or emergency response would be provided. Lastly, the project site plans would be subject to review by OCFA and the Orange County Sheriff Department (OCSD) for compliance with fire and emergency access standards and requirements. With the implementation of the mitigation measure, impacts from the project would be reduced to less than significant levels and the commenter has not provided any substantial evidence to support its claim that the impact would be unmitigable.

Based on the transportation issues raised in the comment, the commenter states that the City should either deny the project or revise and recirculate the Draft EIR. Refer above to responses to specific transportation issues raised in the comment. None of the information presented in the response above constitutes "significant new information" pursuant to CEQA Guidelines Section 15088.5. As a result, a recirculation of the Draft EIR is not required.

Lastly, the commenter states that the Draft EIR "concludes that there is no means to quantify reductions that could result [sic] An, agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data." It is unclear what part of the Draft EIR the commenter is referring to regarding the inability to quantify reductions.

O1-16 The commenter provides background information regarding the uses and requirements of mitigation measures under CEQA. This comment is acknowledged, and no further response is required.

Additionally, the commenter states that the Draft EIR does not analyze project impacts on biological resources and that there is potential for special status species to occur in the area and be adversely impacted by the project. For this proposition, the commenter offers no evidence or data. Draft EIR Section 8.0, *Effects Found Not To Be Significant* (page 8-3

through 8-5), evaluates project impacts on biological resources. As part of the analysis, the Draft EIR utilizes the *Results of a Biological Resources Assessment for the Doheny Village Zoning District Update Project – City of Dana Point, Orange County, California*, prepared by Michael Baker International and dated July 2, 2020, which provides a detailed assessment of the suitability of on-site habitat to support special-status plant and wildlife species; refer to Draft EIR Appendix 11.11, *Biological Resources Report*. As analyzed, given that the project site is completely developed and paved with the existing CUSD bus yard and associated structures with no vegetation on-site, no special status plant or animal species are expected to occur on-site. Therefore, no impacts to special status species would occur.

O1-17 The commenter claims that Draft EIR Section 5.1, *Land Use and Relevant Planning*, erroneously concludes the project is consistent with a number of General Plan policies. The specific policies and alleged inconsistencies identified by the commenter, and responses to those allegations are provided below:

- Policy 2.1: The commenter states that the Draft EIR fails to adequately address construction impacts to the surrounding land uses, and specifically at sensitive receptors.
    - This General Plan policy recommends that the City consider impacts on surrounding land uses and infrastructure when reviewing proposals for new development. The Draft EIR comprehensively analyzes short- and long-term impacts on the project area through the 20 environmental topical areas detailed in CEQA Guidelines Appendix G. These include potential project impacts on nearby sensitive receptors with regards to air quality emissions, GHG emissions, hazards and hazardous materials, land use, noise, public services, transportation, and utilities and service systems.
- Policy 3.1: The commenter claims that the project fails to provide necessary public services as it provides none.
    - This policy does not require new development to directly provide public services. Instead, Policy 3.1 requires new development to contribute its fair share of cost of providing necessary public services and facilities through equitable impact fees and exactions. As stated in the Draft EIR, the project would be required to pay development impact fees to offset project impacts on public services and utilities and service systems.
- Policy 3.6: The commenter argues that the project fails to encourage patterns or development that minimizes air pollution or vehicle miles traveled (VMT), and instead increases these impacts due to the increased VMT from significantly more vehicles that will utilize the apartments and parking structure, compared to its current use as a storage facility for CUSD. Additionally, the commenter states that the project does not promote bicycle and pedestrian access since only one road will implement a bike lane and the only pedestrian access are pathways necessary to the project's construction that does nothing to increase access throughout the community as a whole.
    - As detailed in Draft EIR Table 5.7-2, *Proposed Project Average VMT*, the project would result in 7.23 percent less VMT per capita than the existing Citywide VMT. Thus, the commenter incorrectly concludes that the project would increase VMT.

  - With regards to promoting bicycle and pedestrian access, Policy 3.6 is related to minimizing air pollution and VMT and does not mention promoting bicycle and pedestrian access. Nevertheless, the project would locate a residential development in an area currently served by existing OCTA transit service, pedestrian sidewalks, and existing and planned bicycle lanes along adjacent roadways within Doheny Village. The project itself would also provide improvements, including 10-foot wide sidewalks along Sepulveda Avenue and Victoria Boulevard to accommodate pedestrian and bicycle travel, a proposed boardwalk deck to provide pedestrian connectivity among the ground floor amenities, a Class III bicycle route with signage on the eastbound side of Victoria Boulevard, and public paseos throughout the site. The project would also install bicycle facilities, including short- and long-term bicycle storage, throughout the residential building.
- Policy 4.2: The commenter claims the Draft EIR fails to adequately analyze the hazards of the project.
  - This policy recommends considering natural and man-made hazards in determining the location, type, and intensities of new development. Natural and man-made hazards of the project are evaluated throughout the Draft EIR, including light and glare (Draft EIR Section 5.2, *Aesthetics/Light and Glare*), geological hazards (Draft EIR Section 5.4, *Geology and Soils*), hydrologic and water quality hazards (Draft EIR Section 5.5, *Hydrology and Water Quality*), hazards and hazardous materials (Draft EIR Section 5.6, *Hazards and Hazardous Materials*), transportation hazards due to a geometric design feature or incompatible use (Draft EIR Section 5.7, *Transportation*), air quality emissions (Draft EIR Section 5.8, *Air Quality*), GHG emissions (Draft EIR Section 5.9, *Greenhouse Gas Emissions*), wasteful energy consumption (Draft EIR Section 5.10, *Energy*), and construction and operational noise (Draft EIR Section 5.11, *Noise*), among others.
- Policy 7.2: The commenter states that the consistency analysis only references other land use element policies without explaining how the project is consistent with Policy 7.2.
  - Cross-references to previous General Plan policy consistency analyses is utilized throughout Draft EIR Table 5.1-1, *General Plan Consistency Analysis*, to reduce repetition. Regarding Policy 7.2, the Draft EIR references responses to Policies 1.4 and 3.7, which detail the project's proposed landscape plan, recreational amenities, open space and courtyards, and pedestrian improvements. This is appropriate given that Policy 7.2 is related to improving the appearance of the area through revitalization activities such as landscape design and pedestrian amenities.

O1-18 The commenter states the Draft EIR fails to support its findings on energy impacts with substantial evidence.

As stated in the Draft EIR Section 5.8, *Energy* (page 5.10-8), in accordance with CALGreen and the Specific Plan, the project would comply with applicable requirements of the latest Title 24 Building Energy Efficiency Standards and the CALGreen Code, including sustainable construction materials and energy efficient appliances. It should be noted that at the time of preparation of the Draft EIR, detailed designs of the project were not

available yet. However, before issuance of the grading and building occupancy permits, the project shall demonstrate in the final design plans that it would comply with all applicable standards and requirements to necessarily reduce the construction and operational energy demand. As such, the Draft EIR accurately concluded that construction and operation of the project would have a less than significant effect on the local and regional energy supplies.

As stated in the Draft EIR Section 5.10, *Energy* (page 5.10-11), the project's electricity provider, SDG&E, is required to comply with Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requiring that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by 2024; 52 percent by 2027; 60 percent by 2030; and 100 percent by 2045. As such, by utilizing electricity from SDG&E, the project would promote the use renewable energy and comply with all applicable state-mandated production requirements.

As detailed in the Draft EIR Section 5.10, *Energy* (page 5.10-9), the project's operational-related fuel is estimated using the vehicle miles traveled (VMT) generated by the project. In addition to the VMT, factors considered in the fuel consumption calculation included fleet mix and average fuel efficiency (miles per gallon) for each vehicle type, which were not specific to the project and were obtained from CARB's EMFAC model for Orange County. As such, project-generated VMT is directly related to the fuel consumption, and the Draft EIR correctly calculated the fuel consumption in concluding that the proposed project would have a less than significant impact.

O1-19 The commenter provides background on project description requirements under CEQA and claims that the Draft EIR does not meet these requirements, specifically those related to (a) the project's precise location and boundaries; (b) a clearly written statement of objectives sought by the proposed project; (c) a description of the project's technical, economic, and environmental characteristics; and (d) a statement describing a list of agencies, permits, and approval which the project expects to use.

However, Draft EIR Section 3.0, *Project Description*, provides all the required information. Specifically, (a) the project location and boundaries are detailed in Draft EIR Section 3.1, *Project Location* (page 3-1); (b) project objectives are listed in Draft EIR Section 3.6, *Goals and Objectives* (page 3-22 through 3-23); (c) the project characteristics are detailed in Draft EIR Section 3.4, *Project Characteristics* (page 3-8 through 3-21), and (d) the project approvals are provided in Draft EIR Section 3.7, *Permits and Approvals* (page 3-23 through 3-24).

O1-20 The commenter claims that the proposed project has incrementally expanded over time and will likely continue to expand given its proposed phases (approximately two to three years). Hence, the commenter argues that the Draft EIR is improperly piecemealing a larger project, which is prohibited under CEQA. It is unclear why the commenter states that the project has incrementally expanded over time. The project, as currently proposed, has not changed since release of the Notice of Preparation in July 2021. Additionally, the commenter misunderstood the "two to three years" timeline in Draft EIR Section 3.5, *Construction and Phasing* (page 3-21 through 3-22). To clarify, the project would be built out

in one complete phase, which will take approximately two to three years of construction. No phased development plan is proposed.

The commenter also suggests that the Draft EIR does not utilize an accurate baseline for CEQA analysis and cites various sections of the CEQA Guidelines related to baseline analysis. The commenter claims that environmental review of the proposed project began at least back in 2019 based on surveys that were conducted for the project, and therefore, the baseline for existing environmental conditions in the Draft EIR should be from 2019. It is assumed that the commenter is referring to the Phase I and Phase II environmental site assessment reports that were prepared by Leighton Consulting, Inc. in March 2019. These reports were prepared as part of the due diligence process by the applicant/property owner (Toll Brothers) and were not prepared specifically for the proposed Victoria Boulevard Apartments Project. It is common for environmental documents to incorporate information from various technical studies and planning documents related to the project site and/or area. Thus, the commenter's assumption that environmental review of the proposed project began at least back in 2019 is erroneous. With regards to baseline and existing environmental setting, CEQA Guidelines Section 15125(a)(1) states that the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published. The project's Notice of Preparation was published in July 2021 and thus, is the baseline year for the Draft EIR's existing environmental setting and analysis.

The commenter reiterates that the Draft EIR analyzes a piecemealed project by initially proposing a smaller scale project for approval now that will likely incrementally increase in scale and intensity later and concludes that the project description, as described in the Draft EIR, is therefore not accurate, stable or finite. Refer to specific responses above.

O1-21 The commenter provides a general background on State planning and zoning laws and states that projects cannot conflict with the applicable jurisdictions' general plan and zoning code. The commenter does not raise any concerns regarding environmental issue or information addressed or contained in the Draft EIR. No further response is necessary.

O1-22 The commenter provides background on Senate Bill (SB) 375 and Southern California Association of Governments' (SCAG) *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS) and claims that the proposed land use amendments and entitlements conflict with the 2020-2045 RTP/SCS. The commenter also states that the Draft EIR does not analyze the project's consistency with the 2020-2045 RTP/SCS policies. The comment is incorrect; Draft EIR Table 5.1-3, *SCAG 2020-2045 RTP/SCS Consistency Analysis*, and Table 5.9-2, *Consistency with the 2020-2045 RTP/SCS*, analyze the project's consistency with the 2020-2045 RTP/SCS from a land use and greenhouse gas perspective, respectively.

O1-23 The commenter concludes requesting the City deny the project and the Draft EIR and require the applicant to revise the Draft EIR to ensure consistency with all applicable laws and regulations as detailed in the comment letter, as well as study the "whole of the action" and use an accurate project description and baseline for analysis. Refer to responses to Comments O1-6 through O1-22 for specific responses to such arguments.

O1-24 The comment letter is appended with three exhibits, including a letter from Soil Water Air Protection Enterprise (SWAPE) dated March 8, 2021 regarding local hire requirements and considerations for greenhouse gas modeling, and resumes for the two technical specialists that prepared the letter. The SWAPE letter and resumes are provided as a reference to the commenter's argument regarding the benefits of local hire on greenhouse gas emissions included in the body of the comment letter. Those documents do not directly address the proposed project but simply provides general background information; refer to response to Comment O1-2. The commenter and SWAPE letter do not identify any project-specific environmental issue or information addressed or contained in the Draft EIR. Therefore, no further response is necessary.

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**VIA E-MAIL**

March 6, 2023

Belinda Ann Deines
Principal Planner
City of Dana Point
33282 Golden Lantern
Dana Point, CA 92629
Em: bdeines@danapoint.org

RE: City of Dana Point's Victoria Apartments DEIR Comment Letter

Dear Belinda Ann Deines,

On behalf of the Southwest Mountain States Regional Council of Carpenters ("**Southwest Carpenters**" or "**SWMSRCC**"), our office is submitting these comments for the City of Dana Point's (the "**City**") Victoria Apartments project (the "Project").

The Southwest Carpenters is a labor union representing over 57,000 union carpenters in six states, including California, and has a strong interest in well-ordered land use planning and in 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.

O2-1

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

The Southwest Carpenters incorporates by reference all comments raising issues regarding the DEIR (the "**DEIR**") submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191

(finding that any party who has objected to the project's environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act ("**CEQA**") (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law ("**Planning and Zoning Law**") (Gov. Code, §§ 65000–65010). Pub. Res. Codes §§ 21092.2, and 21167(f) and Gov't Code § 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body.

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

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, 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 a state-approved apprenticeship training program.

O2-1 cont'd

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

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

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

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board

and the University of California, Berkeley Center for Labor Research and Education concluded:

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

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

O2-1 cont'd

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 ("**AB2011**"). AB2011 amended the Planning and Zoning Law to

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.[3]

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

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

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

O2-1 cont'd

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

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

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupations Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.[5]

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

[5] Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project's construction activities. Southwest Carpenters 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 Southwest Carpenters' experience with safe construction site work practices, Southwest Carpenters 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.
- 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.

O2-1 cont'd

**Testing Procedures:**

SECTORS THAT HAVE REOPENED, *available at* https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx.

- 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.
- 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.

O2-1 cont'd

**Planning**

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures

> for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.[6]

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

O2-1 cont'd

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment ("**ICRA**") training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to protect themselves and all others during renovation and construction projects in healthcare environments.[7]

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

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

## III. THE PROJECT WOULD BE APPROVED IN VIOLATION OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

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[6] *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.

[7] For details concerning Southwest Carpenters' ICRA training program, *see* https://icrahealthcare.com/.

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). "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 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).

O2-1 cont'd

B. The City Should Prepare an EIR for the Project

A strong presumption in favor of requiring preparation of an EIR is built into CEQA. This presumption is reflected in what is known as the "fair argument" standard, under which an agency must prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. *Quail Botanical Gardens Found., Inc. v City of Encinitas* (1994) 29 CA4th 1597, 1602; *Friends of "B" St. v City of Hayward* (1980) 106 Cal.App.3d 988, 1002.

The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." Pub Res C §21151; *No Oil, Inc. v City of Los Angeles* (1974) 13 C3d 68, 75; *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 884. Under this test, if a proposed project is not exempt and *may* cause a significant effect on the environment, the lead agency *must* prepare an EIR. Pub Res C §§21100(a), 21151; 14 Cal Code Regs §15064(a)(1), (f)(1). An EIR may be dispensed with only if the lead agency finds no substantial evidence in the initial study or elsewhere in the record that the project may have a significant effect on the environment. *Parker Shattuck Neighbors v Berkeley City Council* (2013) 222 CA4th 768, 785. In such a situation, the agency must adopt a negative declaration. Pub Res C §21080(c)(1); 14 Cal Code Regs §§15063(b)(2), 15064(f)(3).

"Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." Pub Res C §21068; 14 Cal Code Regs §15382. See §13.2. A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. *No Oil, Inc. v City of Los Angeles,* 13 C3d at 83 n16; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 309. If any aspect of the project may result in a significant impact on the environment, an EIR must be prepared even if the overall effect of the project is beneficial. 14 Cal Code Regs §15063(b)(1). See *County Sanitation Dist. No. 2 v County of Kern* (2005) 127 CA4th 1544, 1580.

O2-1 cont'd

This standard sets a "low threshold" for preparation of an EIR. *Consolidated Irrig. Dist. v City of Selma* (2012) 204 CA4th 187, 207; *Nelson v County of Kern* (2010) 190 CA4th 252; *Pocket Protectors v City of Sacramento* (2004) 124 CA4th 903, 928; *Bowman v City of Berkeley* (2004) 122 CA4th 572, 580; *Citizen Action to Serve All Students v Thornley* (1990) 222 CA3d 748, 754; *Sundstrom v County of Mendocino* (1988) 202 CA3d 296, 310. If substantial evidence in the record supports a fair argument that the project may have a significant environmental effect, the lead agency must prepare an EIR even if other substantial evidence before it indicates the project will have no significant effect. See *Jensen v City of Santa Rosa* (2018) 23 CA5th 877, 886; *Clews Land & Livestock v City of San Diego* (2017) 19 CA5th 161, 183; *Stanislaus Audubon Soc'y, Inc. v County of Stanislaus* (1995) 33 CA4th 144, 150; *Brentwood Ass'n for No Drilling, Inc. v City of Los Angeles* (1982) 134 CA3d 491; *Friends of "B" St. v City of Hayward* (1980) 106 CA3d 988. See also 14 Cal Code Regs §15064(f)(1).

As explained in full below, there is a fair argument that the Project will have a significant effect on the environment. As a result, the "low threshold" for preparation of an EIR has been met and the City must prepare an EIR.

C. CEQA Requires Revision and Recirculation of a Environmental Impact Report When Substantial Changes or New Information Comes to Light

To afford the public an opportunity to review and comment on an EIR, "[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 PRC § 21092, and consult again pursuant to Sections 21104 and 21153 before certifying the environmental impact report" in accordance with PRC § 21092.1. CCR § 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)." CCR § 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.*

O2-1 cont'd

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.

Based on the arguments set forth below, in the alternative, Commenter requests that the City recirculate the DEIR upon making any revisions.

D. The DEIR Fails to Consider and Analyze all Feasible, Practical and Effective Mitigation Measures for Significant and Unavoidable Impacts

Although the DEIR recognizes various impacts to air quality, greenhouse gas emissions, noise, transportation and traffic as significant and unavoidable, it fails to consider all feasible, practical, and effective feasible mitigation measures under PRC §§ 21061, 21100(b)(3); see also *Napa Citizens for Honest Gov't v. Napa County Bd. Of Supervisors* (2001) 91 Ca.4th 1018, 1039.

The DEIR is required to review all feasible, practical, and effective mitigation measures as the DEIR concludes that the Project would have significant and unavoidable impacts to several domains identified in the DEIR. However, the DEIR fails to provide a feasibility analysis for mitigation measures that could conceivably reduce the Project's impacts to culture to less than significant levels. For example, the Project could adopt measures to mitigate noise rather than disrupt nearby sensitive receptors, or expand surrounding roads to increase ease of access and traffic. Without a feasibility analysis of more stringent mitigation measures, the DEIR fails as an informational document.

O2-1 cont'd

E. The DEIR Improperly Labels a Mitigation Measure as a "Project Design Feature."

The DEIR improperly labels a mitigation measure as a "Project Design Features" or "PDFs" which the DEIR purports to use in assessing regulatory requirements in the DEIR, and specifically for on-site electric vehicle charging stations in parking lots (DEIR pp. 5.10-9) to reduce potential environmental effects, and specifically for on-site electoral vehicle charging stations.

Relying on this PDF, the DEIR concludes that reduce the Project's impacts or at least its consistency with the Dana Point general plan and its reduction of fuel consumption and lower VMT (DEIR pp. 5.10-9-11).

However, it is established that "'[a]voidance, minimization and / or mitigation measure' . . . are not 'part of the project.' . . . compressing the analysis of impacts and mitigation measures into a single issue . . . disregards the requirements of CEQA." *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 656.

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

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

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

O2-1 cont'd

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 DEIR must consider and resolve the conflict in the evidence. (See *Visalia Retail, L.P. v. City of Visalia* (2018) 20 Cal. App. 5th 1, 13, 17; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal. App. 4th 1099, 1109.) While a lead agency has discretion to formulate standards for determining significance and the need for mitigation measures—the choice of any standards or thresholds of significance must be "based to the extent possible on scientific and factual data and an exercise of reasoned judgment based on substantial evidence. (CEQA Guidelines § 15064(b); *Cleveland Nat'l Forest Found. v. San Diego Ass'n of Gov'ts* (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).

1. *The DEIR Fails to Supports its Findings on Greenhouse Gas Impacts with Substantial Evidence.*

O2-1 cont'd

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 CAP should include the following features:

(1) **Inventory**: Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities (e.g., projects) within a defined geographic area (e.g., lead agency jurisdiction);

(2) **Establish GHG Reduction Goal**: Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

(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;

O2-1 cont'd

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

Second, it is not enough for an environmental document to conclude there is no significant GHG emissions impacts based upon a determination of consistency with a GHG Reduction Plan, without also making a determination based upon substantial evidence of the project's actual cumulative contributions to GHG emissions. In other words, a determination of consistency is only a starting point.[8] Compliance or non-compliance is merely one factor to be considered. The lead agency must explain how reliance on any particular plan or regulation addresses a potential impact.

Here, however, the DEIR identifies but fails to demonstrate consistency with various legislative plans, such as the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and general plan (DEIR p. 5.9-13, 17) that include the

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

above-listed requirements to be considered a qualified CAP or GHG Reduction Plan for the City. As such, the DEIR leaves an analytical gap showing that compliance with said plans can be used for a project-level significance determination for the Project. Second, the DEIR fails to explain how compliance with the SCAG 2020-2045 RTP / SCS, the 2017 Scoping Plan Update, the City's Energy Plan, and the general plan leads to a less than significant impact, and specifically offsetting the increased GHG emissions due to increased traffic in connection with the construction of the apartments and the use of them indefinitely thereafter, nor does it acknowledge updates to these programs since the drafting of the DEIR.

2. *The DEIR Fails to Demonstrate How Compliance or Consistency with Applicable Greenhouse Gas Reduction Plans Will Lead to a Less than Significant Impacts on Greenhouse Gas Emissions.*

Second, the DEIR fails to explain or analyze how compliance with the GHG Reduction Plan (DEIR p. 4.8-22), even if it qualified for a consistency evaluation, will lead to a less than significant impact. The lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project's incremental contribution to the cumulative effect is not cumulatively considerable" (emphasis added).[9]

O2-1 cont'd

3. *The DEIR Fails to Evaluate Cumulative Project GHG Impacts.*

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

Here, there is no evidence that the DEIR's Air Quality, Energy, Greenhouse Gas Emissions, and Health Risk Assessment Impact Analysis evaluated the Project's

[9] Natural Resources Agency (Nov. 2018) Final Statement of Reasons For Regulatory Action: Amendments To The State CEQA Guidelines ("2018 Final Statement of Reason"), p. 6, http://resources.ca.gov/ceqa/docs/2018_CEQA_Final_Statement_of%20Reasons_111218.pdf;

cumulative project GHG emissions, although it is mentioned in reference to other plans (DEIR p. 5.9-23).

The DEIR needs to conduct a cumulative GHG impacts analysis, and if there is a potentially significant impact, impose adequate and all feasible measures.

4. *The DEIR Fails to Analyze Cumulative Project Air Quality Impacts.*

The DEIR indicates that there would be several air quality impact domains but none that result in potentially significant impacts and suggests mitigation would be implemented to attend to the development-specific air quality mitigation measures through compliance with the SCAQMD (DEIR p. 5.8-24, 25). This is inappropriate. "Formulation of mitigation measures should not be deferred until some future time." CEQA Guidelines § 15126.4(a)(1)(B); *see also San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 671 [EIR failed to provide and commit to specific criteria or standard of performance for mitigating impacts to biological habitats]; *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.App.4th 260, 281 [city improperly deferred mitigation to butterfly habitat by failing to provide standards or guidelines for its management]. Implementing mitigation, even if project specific, cannot be deferred until after Project approval.

O2-1 cont'd

The DEIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church (DEIR p. 5.8-21). However, the DEIR neglects, or appears to neglect the other sensitive receptors. Specifically, the Capo Beach Church, Nobis Preschool, Little Thinkers Montessori Academy, The Kid's Gym, and the residences to the south across the PCH. This is a critical omission because these businesses, churches, and schools for young children will likely be significantly impacted by the Project's permanent operations and air quality impacts such as the increased traffic due to the Project's implementation air quality impacts, and other uses and activities corresponding with the significant increase in patrons, residents, and other congestion and use compared to its current use that lasts only part of the year, and thus drastically impacting the air quality analysis conducted in the DEIR, especially given the traffic and parking garage use that will persist throughout all hours of the day if the project is approved and implemented, and notwithstanding the other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.8-21-22), and sustained residential and commercial activities. It appears the proposed Project's development would occur in one phase spanning the two to three years

(DEIR p. 3-21) and therefore it is exceedingly likely that the sensitive receptors would be also impacted by significant construction and permanent air quality impacts at some point in the proposed Project's development cycles in the short term for another two to three years due to construction, and indefinitely beyond that for sustained uses.

The DEIR also indicates that it would not exceed its NOx, CO, and PM emissions with respect to applicable regional thresholds of significance set by the South Coast AQMD (DEIR 5.8-21), but inappropriately limits the distance impact to 70-feet to only include the closest sensitive receptors, without also including the other sensitive receptors and analyzing their distances, even though they are further. This is inappropriate. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. Furthermore, this may create significant and unavoidable impacts that would cumulative contribute to nonattainment designations in the SCAQMD, contrary to the DEIR's suggestions (DEIR p. 5.8-19). Because of this, or that the Project would introduce significant and unavoidable impacts even with mitigation, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O2-1 cont'd

5. *The DEIR Fails to Adequately Disclose, Analyze the Project's Significant Noise Impacts.*

The DEIR conducts a thorough but oftentimes flawed noise analysis. Given that the Project proposes significant changes in the landscape from a public school commercial bus lot that is used only part of the year and at only certain times of day, to uses that will last all year and all times of the day, including improvements such as paved roads, parking, apartments, rooftop amenities, utility infrastructure, landscaping, water quality basis, signage, lighting, property walls, sidewalk improvements, a dog park, a large parking structure for the Project site, it is critical to conduct a thorough noise analysis, especially given the nearby sensitive receptors.

The DEIR identified three sensitive receptor locations, namely, residences along Victoria Boulevard, Orange County Fire Station No. 29, and San Felipe De Jesus Catholic Church (DEIR p. 5.11-18). However, the DEIR neglects, or appears to neglect the other sensitive receptors. Specifically, the Capo Beach Church, Nobis Preschool, Little Thinkers Montessori Academy, The Kid's Gym, and the residences to the south across the PCH. This is a critical omission because these businesses, churches, and schools for young children will likely be significantly impacted by the Project's permanent operations and noise impacts such as the parking structure activity, rooftop activity ambient noise, dog park noise, rooftop air conditioning units, parking lot vehicle movements, noise due to use on the newly-paved roads, significant increases in traffic and other ambient noise compared to its current uses as a public school bus storage facility accessed only limited times throughout the year, and stationary operational noise (DEIR p. 5.11-18-25), and thus drastically impacts the noise analysis conducted in the DEIR, especially given the automobile and parking usage that will persist throughout all hours of the day if the project is approved and implemented, and the nighttime construction and other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.11-18), which includes on estimated demolition and grading, paving, building construction and painting over 31 months, which would utilize heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, scrapers, and other equipment, during the hours of 7:00 am to 8:00 pm Monday through Saturday and only recognizes broader definitions of annoyance (human annoyance) which does not acknowledge to the specific impacts of this project to the nearest sensitive receptor (or other further sensitive receptors), over a nontrivial construction length (approximately 31 months). It appears the proposed Project's development would occur in phases spanning the next two to three years at a minimum (DEIR p. 3-21) and therefore it is exceedingly likely that the sensitive receptors both acknowledged and unacknowledged, including the residences north of Victoria and south of the PCH would be also impacted by significant construction and permanent noise impacts at some point in the proposed Project's development cycle and beyond.

O2-1 cont'd

The DEIR also leapfrogs impacts to these receptors by collapsing them to the closest residences to only those within 70 feet of the Project (DEIR p. 5.11-18), thereby minimizing the noise impacts to these areas.

The DEIR finds that the proposed Project would not result in a significant impact from traffic noise and indicates no feasible mitigation measures exist to reduce Project traffic noise impacts, even though it fails to analyze the other nearby sensitive receptors, including schools for small children and churches, and significant increases in noise levels beyond the current site uses, especially with the implementation of a nearly 700-space parking structure (DEIR p. 5.26, 28-31).

Because of this, or that the Project would likely introduce significant and potentially unavoidable impacts even with mitigation, and as suchthe City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements, and certainly not the latter. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements.

O2-1 cont'd

6. *The DEIR Fails to Adequately Analyze Hazards and Hazardous Materials Impacts.*

The DEIR relies on the Leighton Consulting Inc. Phase I Environmental Site Assessment Report and the Limited Phase II Environmental Site Assessment, both from 2019 to assess the hazard and hazardous materials impacts (DEIR p. 5.6-1).

The DEIR also fails to note the proposed Project in or near existing in high and very high fire hazard severity zones, which is critical especially given that it is near undeveloped strips of land surrounding the site on all sides.

However despite several considerations that are not addressed in the DEIR, it nonetheless concludes less than significant impacts for fire hazard (DEIR p. 8-9), no impact to emergency facilities, and does not recognize that the Project is located within 0.25 miles of an existing or planned school, or routine transport of hazardous materials. Each of these conclusions is reached without full assessment of relevant and significant factors to fully evaluate their impacts to the proposed project site and surrounding areas, especially with the recognition of two fuel dispenser islands, and prior pesticides and underground storage tanks on site (DEIR p. 5.6-3).

First, the DEIR indicates that its compliance with federal, state, and local regulations are sufficient to ensure proper handling of hazardous materials to and from the project site. However this does not attend to the specific design of the project. 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). With no tailored analysis to the transportation and use of hazards and hazardous materials to a project that is expected to last another two to three years (at least), and with continued commercial truck and other uses beyond that, it is insufficient to only rely on regulatory requirements and guidelines.

O2-1 cont'd

7. *The DEIR Fails to Adequately Analyze Significant Traffic and Transportation Impacts.*

As was mentioned in the prior analyses, the abundance of nearby sensitive receptors, the DEIR neglects, or appears to neglect the other sensitive receptors including an additional church, schools, and residences. Specifically, the DEIR cites to the OPR's 2018 indicating a 15% reduction in VMT consistent with SB 743, focusing on thresholds of significance for three types of developments: residential, office, and retail. The DEIR believes that it matches the residential proxy category. Specifically, "A proposed residential project exceeding a level of 15 percent below average existing regional (i.e., City of Dana Point) VMT per capita may indicate a significant transportation impact." (DEIR 5.7-6-10).

The DEIR also used the CEQA Guidelines Appendix G checklist (a-d) for its assessment, and found that there was no mitigation required for less than significant impacts to (a) and (b) where (a) conflicts with a program plan, etc. and (b) conflicts with CEQA section 15064.3(b), and less than significant impacts with mitigation

incorporated to (c) and (d), where (c) increasing hazards due to a geometric design feature, or (d) impact emergency access. The DEIR offers vague assertions regarding compliance with existing policies for bicycle and pedestrian facilities, and does not provide any direct transit service. Also noteworthy is the presence of the adjacent Fire Station 29, and how it would very likely be impacted due to any road closures on Victoria due to construction. Yet the only mitigation proposed fails to acknowledge the fire station and only provides emergency access across the Project site on the opposite side of the station (DEIR 5.7-12). This is a critical omission because it impacts a fire station's ability to respond to emergencies, and especially when the construction is expected to last six days a week and nearly the entire day from the hours of 7:00 am to 8:00 pm. Furthermore, because these residences, churches, and schools are significantly closer to the proposed Project's permanent operations and transportation impacts such as the traffic impacts, and residential and parking activity and thus drastically impacts the traffic and transportation analyses conducted in the DEIR, especially given the residential and parking structure usage that will persist throughout all hours of the day if the project is approved and implemented, and the nighttime concrete pouring and other construction activities that is proposed and likely to impact the currently existing sensitive receptors (DEIR p. 5.7-15), and sustained residential and parking activities would nonetheless result in significant an unavoidable impacts.

O2-1 cont'd

Furthermore, because the Project would introduce mitigation to reduce impacts to less than significant levels, (DEIR p. 5.7-16), this seems unlikely with the incomplete analysis performed above, and in reality impacts are likely to be significant even with mitigation incorporated. As such, the City is required to determine either that (a) there is no feasible way to lessen or avoid the significant effect (CEQA Guidelines § 15091) and (b) to specifically identify expected benefits from the project that will outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines § 15093). However there is no clear indication the DEIR addresses these two requirements, and certainly not the latter. Without attending to these CEQA requirements, the Project should be denied outright and if the Project wishes to move forward the DEIR should be redrafted and recirculated to incorporate these requirements. The DEIR also concludes that there is no means to quantify reductions that could result An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

8. *The DEIR Fails to Adequately Analyze Any Biological Impacts.*

When imposing mitigation, lead agencies must ensure there is a "nexus" and "rough proportionality" between the measure and the significant impacts of the project. CEQA Guidelines, § 15126.4, subd. (a)(4)(A); see *Nollan v. Cal. Coastal Commission* (1987) 483 U.S. 825; *Dolan v. City of Tigard* (1994) 512 U.S. 374. All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies. CEQA Guidelines, § 15041. Formulation of mitigation measures shall not be deferred until some future time. CEQA Guidelines, § 15126.4, subd. (a)(B).

It is important to note the DEIR analyzes or makes no attempt to analyze ***any*** biological impacts. Given the Project site's size, there is a possibility, perhaps even a likelihood, that special status-plant or species exist on the Project site. Yet, with no analysis, it is impossible to determine if any federally, state, or locally protected plant or animal species are being disrupted. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311. The City must reevaluate the possibility of special-status plant species in the area in light of these considerations.

O2-1 cont'd

9. *The DEIR Fails to Supports its Land Use Analysis with Substantial Evidence.*

The DEIR claims consistency of its Land Use Analysis with the City's General Plan (DEIR p. 5.1-8-24). This is in error. Specifically, there is a conflict with Policy 2.1 which fails to adequately attend to the construction impacts to the surrounding land uses, and specifically as sensitive receptors. (DEIR 5.1-11). For policy 3.1, the Project fails to provide necessary public services, since it provides none. (DEIR 5.1-11). Similarly, Policy 3.6 fails to encourage patterns or development that minimizes air pollution or VMT, and instead increases these impacts due to the increased VMT usage from significantly more vehicles that will utilize the apartments and parking structure, compared to its current use as a storage facility for the school district (DEIR p. 5.1-11), nor does it promote bicycle and pedestrian access, since only one road will implement a bike lane and the only pedestrian access are pathways necessary to the project's construction that does nothing to increase access throughout the community as a whole (DEIR p. 5.1-12). And it fails to adequately attend to the hazards of the project, and is thus in violation of Policy 4.2 (DEIR 5.1-12). Policy 7.2 merely references other land use element policies without explaining how it is consistent (DEIR 5.1-13). This is inappropriate. Beyond that, it is clear that although the land use

analysis is extensive, it is oftentimes riddled with inconsistences and lacks a full appreciation for the project's full impacts and intended spirit of the general plan. An agency may not avoid its responsibility to prepare proper environmental analysis by failing to gather relevant data. *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311.

10. *The DEIR Fails to Support its Findings on Energy Impacts with Substantial Evidence.*

Pursuant to CEQA Guidelines, section 15126.2, subsection (b), analysis of a project's energy impacts "should include the project's energy use for all project phases (DEIR p. 4.13-29) and components, including transportation-related energy, during construction, and operation." Further, the Guidelines provide that "other relevant considerations may include . . . the project's size, location, orientation, equipment use, and any renewable energy features that could be incorporated into the project." Ibid.

Failing to undertake "an investigation into renewable energy options that might be available or appropriate for a project" violates CEQA. *California Clean Energy Committee v. City of Woodland* (2014) 225 Cal.App.4th 173, 213. Energy conservation under CEQA is defined as the "wise and efficient use of energy." CEQA Guidelines, appen. F, § I. The "wise and efficient use of energy" is achieved by "(1) decreasing overall per capita energy consumption, (2) decreasing reliance on fossil fuels such as coal, natural gas and oil, and (3) increasing reliance on renewable energy resources." *Ibid.*

O2-1 cont'd

According to Appendix F of the CEQA Guidelines, an environmental document must consider and analyze:

1. The project's energy requirements and its energy use efficiencies;

2. The project's effects on local and regional energy supplies and on requirements for additional capacity;

3. The project's effects on peak-period and base-period energy demands;

4. The degree to which the project complies with existing energy standards;

5. The project's effects on energy resources; and,

6. The project's projected transportation energy use and its overall use of efficient transportation alternatives.

CEQA Guidelines, appen. F.

Basing a Project's energy impacts on its compliance with the California Building Energy Efficiency Standards does not constitute an adequate analysis of energy. *Ukiah Citizens for Safety First v. City of Ukiah* (2016) 248 Cal.App.4th 256, 264-65; see Cal. Code Regs., tit. 24, part 6. Similarly, the court in *City of Woodland* held unlawful an energy analysis that relied on compliance with Title 24, that failed to assess transportation energy impacts, and that failed to address renewable energy impacts. *City of Woodland*, *supra*, 225 Cal.App.4th at pp. 209-13.

First, the DEIR briefly mentions certain practices and equipment which the Project will engage to reduce energy consumption, though the details are vague and uncertain. For example, the DEIR suggests that construction contractors will comply with various federal and statute regulations and recommendations, but provides no specifics as to how that would be achieved (DEIR p. 5.10-8).

Second, in addressing long-term energy impacts during operation, the DEIR admits that the project would not directly require excessive long-term operational fuel consumption (DEIR p 5.10-9). It fails, though, to consider renewable energy uses and feasible conservation efforts beyond references that may or may not be implemented or adhering to state-mandated production requirements.

O2-1 cont'd

Third, the DEIR concludes that, with respect to operation-related fuel usage, energy impacts would be less than significant. It bases this conclusion on a cursory analysis of VMT and the contention that "the amount of energy and fuel consumed by construction and operation of the Project would not be inefficient, wasteful, or unnecessary." (DIER p. p. 5.10-12). That the Project would not cause or result in the need for additional measure of or justification for whether this Project will result in significant energy impacts or waste and inefficiency. This line of analysis is neither reasonable nor focused on energy use caused by the Project.

Without assessing the Project's use of energy activities in accordance with the CEQA Guidelines, the DEIR concludes that the Project will not result in wasteful, inefficient, or unnecessary energy use. Consequently, it must be recirculated after broadening its scope and incorporating details, in particular, expanded options for renewable energy solutions.

11. *The DEIR's Project Description Is Inadequate.*

The DEIR must be recirculated because it also lacks an adequate Project description. "[A]n accurate, stable and finite project description is the sine qua non of an

informative and legally sufficient" environmental document. *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 200. "A curtailed or distorted project description may stultify the objectives of the reporting process" as an accurate, stable, and finite project description is necessary to allow "affected outsiders and public decision-makers balance the proposal's benefit against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance. *Ibid.* at pp. 192-93.

CEQA Guidelines, section 15124 requires a project describe in enough detail to allow for evaluation of its potential environmental impacts: (a) the project's precise location and boundaries; (b) a clearly written statement of objectives sought by the proposed project; (c) a description of the project's technical, economic, and environmental characteristics; and (d) a statement describing a list of agencies, permits, and approval which the project expects to use.

The DEIR's Project description does not satisfy this project description requirement by failing to clearly include a statement of objectives. (DEIR p. 1-3). Rather, the Project description merely provides some, but not all of the requirements of CEQA Guidelines *Ibid.* Furthermore, the DEIR provides no description of the Project's economic characteristics or clearly written statement and objectives. For these reasons too, the DEIR must be revised and recirculated.

O2-1 cont'd

12. *The Project and its CEQA Analysis Violate CEQA for Improper Piecemealing and Incorrect (Inflated) Baseline.*

Project has incrementally expanded over time and will likely continue to expand given its proposed phases, approximately two to three years, throughout the DEIR. Such expansion is suspect and in violation of CEQA's piecemealing prohibition. (*Lighthouse Field Beach Rescue v. City of Santa Cruz* (2005) 131 Cal.App.4th 1170, 1208–1209 ["The requirements of CEQA cannot be avoided by piecemeal review which results from 'chopping a large project into many little ones-each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences.' (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283–284.")].) The danger of piecemealing is many-fold. First, it precludes consideration of impacts of the "whole of an action" under CEQA Guidelines § 15387, as has happened here. As explained by courts:

> "[O]nly through an accurate view of the project may the public and interested parties and public agencies balance the proposed project's benefits against its environmental cost, consider appropriate mitigation measures, assess the advantages of terminating the proposal and properly weigh other alternatives...." (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at p. 1454, 263 Cal.Rptr. 340.) Here, the failure to consider the expansion of the wastewater treatment plant as part of the project under consideration resulted in an inaccurate project description and incomplete identification and analysis of the environmental effects of the development project (*Santiago County Water Dist. v. County of Orange, supra,* 118 Cal.App.3d at p. 829, 173 Cal.Rptr. 602.) As stated in **717 *Citizens Assn. for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 166, 217 Cal.Rptr. 893, "[t]he danger of filing separate environmental documents for the same project is that consideration of the cumulative impact on the environment of the two halves of the project may not occur. This danger was here realized."
>
> Thus, because the FEIR did not "adequately apprise all interested parties of the true scope of the project for intelligent weighing of the environmental consequences of the project," informed decision making was precluded. The FEIR is inadequate as a matter of law. (*City of Santee v. County of San Diego, supra,* 214 Cal.App.3d at pp. 1454–1455, 263 Cal.Rptr. 340.) The certification by the Board of the FEIR as complete and adequate constituted an abuse of discretion. (*County of Inyo v. City of Los Angeles, supra,* 71 Cal.App.3d at p. 200, 139 Cal.Rptr. 396.)

(*San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 734–735.)

O2-1 cont'd

Second, piecemealing *alters* the accurate baseline of the CEQA analysis. Thus, under CEQA, the baseline environmental conditions (to measure the Project's impacts against) must be set as early as possible when the Project's environmental review begins. (CEQA Guidelines § 15125(a)(1).) Here, the environmental review of the project began at least in 2019, and likely earlier, given the surveys conducted. Therefore the Project's baseline or existing environmental conditions for purposes of CEQA review must go back to the year of 2019 and measure the Project's proposed changes – regardless of when they were proposed (in 2019 or later) – against that lower 2019 baseline. However, as evident from the DEIR, the applicant is not measuring the

Project's impacts "as a whole" or as of 2019 and its iterations through 2027 and beyond, but rather focuses on the impacts of the proposed *changes* after the 2019 and 2023 approvals. As such, the Applicant is seeking to alter/inflate the baseline and thereby understate the Project's impacts.

Further, for CEQA purposes, the fact that a project is entitled or is warranted under the general plan is not relevant for the baseline. (CEQA Guidelines § 15125(a)(3) ["An existing conditions baseline shall not include hypothetical conditions such as those that might be allowed, but have never actually occurred under existing permits or plans as the baseline."])

Stated otherwise, the Applicant is trying to use various 2019 baselines and surveys instead more updated or recent baselines post-covid, and thereby *inflates* the baseline through its 2019 approvals and other changes in the surrounding area, in order to minimize and understate the changes it proposes. This is the classic case of trying to *end run* CEQA, where courts agree a *different* baseline must be used. "Of course, were there evidence of an attempted end run around CEQA, use of a different baseline may well be appropriate." (*Hollywoodians Encouraging Rental Opportunities v. City of Los Angeles* (2019) 37 Cal.App.5th 768, 781, fn. 11.) (*See also*, *POET, LLC v. State Air Resources Bd* (2017) 12 Cal.App.5th 52, 83 [use of an inflated baseline had the effect of understating the increase of impacts, requiring reversal]; *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 953 (*"County of Amador"*) [without an accurate baseline, the "analysis of impacts, mitigation measures and project alternatives becomes impossible."])

O2-1 cont'd

Furthermore, an accurate, stable, and finite project description must be the *bona fide* subject of an EIR, An accurate, stable and finite project description is the sine qua non of an informative and legally sufficient EIR; the defined project and not some different project must be the EIR's bona fide subject. (*Mira Monte Homeowners Assn. v. County of Ventura* (1985) 165 Cal.App.3d 357, 365 [212 Cal.Rptr. 127].) "CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." (Id., at p. 366, internal quotation marks omitted.) (*Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592, emph. added.)

The Project appears to have manifestly piecemealed the Project by initially proposing a smaller scale project for approval now and will likely incrementally increasing the scale and intensity of the Project. The Project represents a classic case of piecemealing where the same applicant fails to accurately disclose the full scope of the project during the initial environmental review and incrementally increases the project after the initial environmental document is approved, in order to avoid analyzing the impacts of the "whole of the action" as CEQA requires. That is what CEQA prohibits and to which the case law is clear. (*Arviv Enterprises, Inc. v. South Valley Area Planning Com.* (2002) 101 Cal.App.4th 1333, 1348–1351 [requiring an EIR for the whole of an action, including *permitted* and even *built out* single family homes and rejecting the applicant's argument about *vested rights,* "Compliance with these existing laws was thus required notwithstanding the City's failures and/or Arviv's misleading project descriptions which may have prevented the City from appreciating the full scope of the proposed development." *Id.* at 1350.])

## IV. THE PROJECT VIOLATES THE STATE PLANNING AND ZONING LAW AS WELL AS THE CITY'S GENERAL PLAN

O2-1 cont'd

### A. Background Regarding the State Planning and Zoning Law

A DEIR must identify, fully analyze and mitigate any inconsistencies between a proposed project and the general, specific, regional, and other plans that apply to the project. CEQA Guidelines § 15125(d); *Pfeiffer v. City of Sunnyvale City Council* (2011) 200 Cal.App.4th 1552, 1566; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal.App.4th 859, 881. There does not need to be a direct conflict to trigger this requirement; even if a project is "incompatible" with the "goals and policies" of a land use plan, the IS/MND must assess the divergence between the project and the plan, and mitigate any adverse effects of the inconsistencies. *Napa Citizens for Honest Government v. Napa County Bd. of Supervisors* (2001) 91 Cal.App.4th 342, 378-79; *see also Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903 (holding under CEQA that a significant impact exists where project conflicts with local land use policies); *Friends of "B" Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 998 (held county development and infrastructure improvements must be consistent with adopted general plans) (citing Gov. Code 65302).

### B. The Proposed Land Use Amendments and Entitlements Conflict with SB 375 and SCAG's 2020 Regional Transportation Plan and Sustainable Communities Strategy

In 2008, Senate Bill 375 amended CEQA and empowered metropolitan planning organizations (MPOs) to enact regional plans to reduce GHG emissions from passenger vehicles. MPOs are required to prepare regional transportation plans (RTP) and sustainable community strategies (SCS) in an effort to meet CARB's GHG reduction goals under SB 375. Gov. Code § 65080(b)(2)(B). SB 375 specifically targets GHG emissions from passenger vehicles by linking land use decisions to transportation planning. *Id.* If the regional SCS/RTP plan does not achieve CARB's GHG reduction targets, then the MPO is required to create an alternative planning strategy (APS) that shows how the targets can be achieved through other mechanism such as alternative development patterns, infrastructure decisions, or other alternative transportation measures or policies that can still achieve CARB's reduction targets. Gov. Code § 65080(b)(2)(I).

For this Project, the applicable plan is SCAG's 2020-2045 RTP/SCS plan adopted on September 3, 2020.

O2-1 cont'd

The DEIR fails to analyze the Project's consistency with SCAG's 2020-2045 RTP/SCS plan given the many unverified and unanalyzed transportation impacts and the strong likelihood of increases to VMT rather than decreases due to the Project's development on land that consists mostly of parking spaces which will be replaced with substantial residential, commercial, and hotel uses, as well as no indication of transit discounts or improvements to accessibility to the Amtrak commuters during construction or how it impacts their commute or use after the Project's completion, or how the Project's significant patronage, resident, and hotel occupant increases would affect demand on the surrounding area and transportation networks. For example, SCAG's 2020 RTP/SCS requires or suggests the following that the Project fails to consider or adopt in the DEIR:

- Land Use Policies: pursuing affordable housing or providing more transportation options for short trips;[10]
- Transportation Network Strategies: providing transit fare discounts; providing transit integration strategies such as integration of active transportation and transit by improving pedestrian access and bicyclist access;[11]

[10] SCAG (Sep. 2020) 2020 RTP/SCS, pp. 25-36.
[11] *Id.*

- Transportation Demand Management Strategies: encourage use and implementation of TDM strategies such as rideshare incentives, parking management, parking subsidies for carpoolers, incentives for telecommuting, integrated mobility hubs, or additional investments in active transportation infrastructure;[12] and
- Clean Vehicle Technology Strategies: use of neighborhood electric vehicles (NEVs), and anticipating shared mobility platforms, car-to-car communication or automated vehicle technologies.[13]

The DEIR fails to demonstrate consistency with the most recent SCAG 2020-2045 RTP / SCS Plan and should be revised to meet its goals and policies. O2-1 cont'd

## V. CONCLUSION

Based on the foregoing, we respectfully request the City deny the Project, its DEIR, and order the applicant to revise the Project to ensure its consistency with all applicable laws and regulations as detailed above, as well as to study the "whole of the action" and use the accurate *bona fide* project description and baseline for purposes of CEQA review. "CEAQ contemplates *serious* and not superficial or pro forma consideration of the potential environmental consequences of a project. *Leonoff v. Monterey County Bd. Of Supervisors* (1990) 222 Cal.App.3d 1337, 1347, 272 Cal.Rptr. 372; emphasis added; *Burbank-Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 593, fn. 3.

If the City has any questions or concerns please do not hesitate to contact our office.

Sincerely,

Jason A. Cohen, Esq.
Attorneys for Southwest Regional Council of Carpenters

[12] *Id.*
[13] *Id.*

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); and

Air Quality and GHG Expert Matt Hagemann CV (Exhibit C); and

SWAPE Comments on Victoria Boulevard Apartments Project (Exhibit D).

O2-1 cont'd

O2-2

**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
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**Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling**

Dear Mr. Tsai,

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

## Worker Trips and Greenhouse Gas Calculations

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

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

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

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.

## 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.

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

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

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

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

[9] "CalEEMod User's Guide." CAPCOA, November 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.
[10] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.
[11] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.
[12] "Appendix A Calculation Details for CalEEMod." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.
[13] "Appendix D Default Data Tables." CAPCOA, October 2017, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

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

## Practical Application of a Local Hire Requirement and Associated Impact

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

| **Local Hire Provision Net Change** | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT $CO_2e$) | 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.

[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.

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

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

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

| 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** |
| **Mininum** | **10.80** | **10.80** |
| **Maximum** | **19.80** | **14.70** |
| **Range** | **9.00** | **3.90** |

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1713 | 1.8242 | 1.1662 | 2.4000e-003 | 0.4169 | 0.0817 | 0.4986 | 0.1795 | 0.0754 | 0.2549 | 0.0000 | 213.1969 | 213.1969 | 0.0601 | 0.0000 | 214.6993 |
| 2022 | 0.6904 | 4.1142 | 6.1625 | 0.0189 | 1.3058 | 0.1201 | 1.4259 | 0.3460 | 0.1128 | 0.4588 | 0.0000 | 1,721.6826 | 1,721.6826 | 0.1294 | 0.0000 | 1,724.9187 |
| 2023 | 0.6148 | 3.3649 | 5.6747 | 0.0178 | 1.1963 | 0.0996 | 1.2959 | 0.3203 | 0.0935 | 0.4138 | 0.0000 | 1,627.5295 | 1,627.5295 | 0.1185 | 0.0000 | 1,630.4925 |
| 2024 | 4.1619 | 0.1335 | 0.2810 | 5.9000e-004 | 0.0325 | 6.4700e-003 | 0.0390 | 8.6300e-003 | 6.0400e-003 | 0.0147 | 0.0000 | 52.9078 | 52.9078 | 8.0200e-003 | 0.0000 | 53.1082 |
| **Maximum** | **4.1619** | **4.1142** | **6.1625** | **0.0189** | **1.3058** | **0.1201** | **1.4259** | **0.3460** | **0.1128** | **0.4588** | **0.0000** | **1,721.6826** | **1,721.6826** | **0.1294** | **0.0000** | **1,724.9187** |

## 2.1 Overall Construction

### Mitigated Construction

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

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

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

## 2.2 Overall Operational

### Mitigated Operational

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

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

## 3.0 Construction Detail

### Construction Phase

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

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 9.7000e-004 | 7.5000e-004 | 8.5100e-003 | 2.0000e-005 | 2.4700e-003 | 2.0000e-005 | 2.4900e-003 | 6.5000e-004 | 2.0000e-005 | 6.7000e-004 | 0.0000 | 2.2251 | 2.2251 | 7.0000e-005 | 0.0000 | 2.2267 |
| **Total** | **2.9000e-003** | **0.0641** | **0.0233** | **2.0000e-004** | **6.4100e-003** | **2.1000e-004** | **6.6200e-003** | **1.7300e-003** | **2.0000e-004** | **1.9300e-003** | **0.0000** | **19.6816** | **19.6816** | **1.2800e-003** | **0.0000** | **19.7136** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

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

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0382 | 1.2511 | 0.4011 | 4.3000e-003 | 0.1113 | 1.4600e-003 | 0.1127 | 0.0321 | 1.4000e-003 | 0.0335 | 0.0000 | 417.9930 | 417.9930 | 0.0228 | 0.0000 | 418.5624 |
| Worker | 0.3753 | 0.2708 | 3.1696 | 0.0101 | 1.0840 | 8.4100e-003 | 1.0924 | 0.2879 | 7.7400e-003 | 0.2957 | 0.0000 | 909.3439 | 909.3439 | 0.0234 | 0.0000 | 909.9291 |
| **Total** | **0.4135** | **1.5218** | **3.5707** | **0.0144** | **1.1953** | **9.8700e-003** | **1.2051** | **0.3200** | **9.1400e-003** | **0.3292** | **0.0000** | **1,327.3369** | **1,327.3369** | **0.0462** | **0.0000** | **1,328.4916** |

## 3.6 Paving - 2023

### Unmitigated Construction On-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

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

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

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

## 6.2 Area by SubCategory

**Mitigated**

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

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

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

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

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

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

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

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

## 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 | 4.2769 | 46.4588 | 31.6840 | 0.0643 | 18.2675 | 2.0461 | 20.3135 | 9.9840 | 1.8824 | 11.8664 | 0.0000 | 6,234.7974 | 6,234.7974 | 1.9495 | 0.0000 | 6,283.5352 |
| 2022 | 5.3304 | 38.8967 | 49.5629 | 0.1517 | 9.8688 | 1.6366 | 10.7727 | 3.6558 | 1.5057 | 5.1615 | 0.0000 | 15,251.5674 | 15,251.5674 | 1.9503 | 0.0000 | 15,278.5288 |
| 2023 | 4.8957 | 26.3317 | 46.7567 | 0.1472 | 9.8688 | 0.7794 | 10.6482 | 2.6381 | 0.7322 | 3.3702 | 0.0000 | 14,807.5269 | 14,807.5269 | 1.0250 | 0.0000 | 14,833.1520 |
| 2024 | 237.1630 | 9.5575 | 15.1043 | 0.0244 | 1.7884 | 0.4698 | 1.8628 | 0.4743 | 0.4322 | 0.5476 | 0.0000 | 2,361.3989 | 2,361.3989 | 0.7177 | 0.0000 | 2,379.3421 |
| **Maximum** | **237.1630** | **46.4588** | **49.5629** | **0.1517** | **18.2675** | **2.0461** | **20.3135** | **9.9840** | **1.8824** | **11.8664** | **0.0000** | **15,251.5674** | **15,251.5674** | **1.9503** | **0.0000** | **15,278.5288** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0643 | 0.0442 | 0.6042 | 1.7100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 170.8155 | 170.8155 | 5.0300e-003 | | 170.9413 |
| **Total** | **0.1916** | **4.1394** | **1.5644** | **0.0136** | **0.4346** | **0.0139** | **0.4485** | **0.1176** | **0.0133** | **0.1309** | | **1,463.0568** | **1,463.0568** | **0.0927** | | **1,465.3750** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

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

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

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

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 3.2162 | 2.1318 | 29.7654 | 0.0883 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,800.6857 | 8,800.6857 | 0.2429 | | 8,806.7582 |
| **Total** | **3.6242** | **15.3350** | **33.1995** | **0.1247** | **9.8688** | **0.0949** | **9.9637** | **2.6381** | **0.0883** | **2.7263** | | **12,697.2339** | **12,697.2339** | **0.4665** | | **12,708.8966** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 3.0203 | 1.9287 | 27.4113 | 0.0851 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 8,478.4408 | 8,478.4408 | 0.2190 | | 8,483.9160 |
| **Total** | **3.3229** | **11.9468** | **30.5127** | **0.1203** | **9.8688** | **0.0797** | **9.9485** | **2.6381** | **0.0738** | **2.7118** | | **12,252.3170** | **12,252.3170** | **0.4172** | | **12,262.7460** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.5707 | 0.3513 | 5.1044 | 0.0165 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,641.0852 | 1,641.0852 | 0.0401 | | 1,642.0886 |
| **Total** | **0.5707** | **0.3513** | **5.1044** | **0.0165** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,641.0852** | **1,641.0852** | **0.0401** | | **1,642.0886** |

## 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 | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |
| Unmitigated | 9.8489 | 45.4304 | 114.8495 | 0.4917 | 45.9592 | 0.3360 | 46.2951 | 12.2950 | 0.3119 | 12.6070 | | 50,306.6034 | 50,306.6034 | 2.1807 | | 50,361.1208 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

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

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0715 | 0.0489 | 0.5524 | 1.6100e-003 | 0.1677 | 1.3500e-003 | 0.1690 | 0.0445 | 1.2500e-003 | 0.0457 | | 160.8377 | 160.8377 | 4.7300e-003 | | 160.9560 |
| **Total** | **0.2019** | **4.1943** | **1.5706** | **0.0133** | **0.4346** | **0.0141** | **0.4487** | **0.1176** | **0.0135** | **0.1311** | | **1,430.6932** | **1,430.6932** | **0.0955** | | **1,433.0812** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

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

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 3.5872 | 2.3593 | 27.1680 | 0.0832 | 8.9533 | 0.0701 | 9.0234 | 2.3745 | 0.0646 | 2.4390 | | 8,286.9013 | 8,286.9013 | 0.2282 | | 8,292.6058 |
| **Total** | **4.0156** | **15.5266** | **30.9685** | **0.1186** | **9.8688** | **0.0957** | **9.9645** | **2.6381** | **0.0891** | **2.7271** | | **12,075.9763** | **12,075.9763** | **0.4663** | | **12,087.6341** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 3.3795 | 2.1338 | 24.9725 | 0.0801 | 8.9533 | 0.0681 | 9.0214 | 2.3745 | 0.0627 | 2.4372 | | 7,983.7318 | 7,983.7318 | 0.2055 | | 7,988.8683 |
| **Total** | **3.6978** | **12.1065** | **28.3496** | **0.1144** | **9.8688** | **0.0803** | **9.9491** | **2.6381** | **0.0743** | **2.7124** | | **11,655.1325** | **11,655.1325** | **0.4151** | | **11,665.5099** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

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

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.6406 | 0.3886 | 4.6439 | 0.0155 | 1.7884 | 0.0134 | 1.8018 | 0.4743 | 0.0123 | 0.4866 | | 1,545.2860 | 1,545.2860 | 0.0376 | | 1,546.2262 |
| **Total** | **0.6406** | **0.3886** | **4.6439** | **0.0155** | **1.7884** | **0.0134** | **1.8018** | **0.4743** | **0.0123** | **0.4866** | | **1,545.2860** | **1,545.2860** | **0.0376** | | **1,546.2262** |

## 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 | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |
| Unmitigated | 9.5233 | 45.9914 | 110.0422 | 0.4681 | 45.9592 | 0.3373 | 46.2965 | 12.2950 | 0.3132 | 12.6083 | | 47,917.8005 | 47,917.8005 | 2.1953 | | 47,972.6839 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction

### Unmitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7654 | 210.7654 | 0.0600 | 0.0000 | 212.2661 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6554 | 1,418.6554 | 0.1215 | 0.0000 | 1,421.6925 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4412 | 1,342.4412 | 0.1115 | 0.0000 | 1,345.2291 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6355 | 44.6355 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6554** | **1,418.6554** | **0.1215** | **0.0000** | **1,421.6925** |

## 2.1 Overall Construction

### Mitigated Construction

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2021 | 0.1704 | 1.8234 | 1.1577 | 2.3800e-003 | 0.4141 | 0.0817 | 0.4958 | 0.1788 | 0.0754 | 0.2542 | 0.0000 | 210.7651 | 210.7651 | 0.0600 | 0.0000 | 212.2658 |
| 2022 | 0.5865 | 4.0240 | 5.1546 | 0.0155 | 0.9509 | 0.1175 | 1.0683 | 0.2518 | 0.1103 | 0.3621 | 0.0000 | 1,418.6550 | 1,418.6550 | 0.1215 | 0.0000 | 1,421.6921 |
| 2023 | 0.5190 | 3.2850 | 4.7678 | 0.0147 | 0.8497 | 0.0971 | 0.9468 | 0.2283 | 0.0912 | 0.3195 | 0.0000 | 1,342.4409 | 1,342.4409 | 0.1115 | 0.0000 | 1,345.2287 |
| 2024 | 4.1592 | 0.1313 | 0.2557 | 5.0000e-004 | 0.0221 | 6.3900e-003 | 0.0285 | 5.8700e-003 | 5.9700e-003 | 0.0118 | 0.0000 | 44.6354 | 44.6354 | 7.8300e-003 | 0.0000 | 44.8311 |
| **Maximum** | **4.1592** | **4.0240** | **5.1546** | **0.0155** | **0.9509** | **0.1175** | **1.0683** | **0.2518** | **0.1103** | **0.3621** | **0.0000** | **1,418.6550** | **1,418.6550** | **0.1215** | **0.0000** | **1,421.6921** |

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

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

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

## 2.2 Overall Operational

### Unmitigated Operational

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

## 2.2 Overall Operational

**Mitigated Operational**

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

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

## 3.0 Construction Detail

**Construction Phase**

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

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.9300e-003 | 0.0634 | 0.0148 | 1.8000e-004 | 3.9400e-003 | 1.9000e-004 | 4.1300e-003 | 1.0800e-003 | 1.8000e-004 | 1.2600e-003 | 0.0000 | 17.4566 | 17.4566 | 1.2100e-003 | 0.0000 | 17.4869 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.2000e-004 | 5.3000e-004 | 6.0900e-003 | 2.0000e-005 | 1.6800e-003 | 1.0000e-005 | 1.6900e-003 | 4.5000e-004 | 1.0000e-005 | 4.6000e-004 | 0.0000 | 1.5281 | 1.5281 | 5.0000e-005 | 0.0000 | 1.5293 |
| **Total** | **2.6500e-003** | **0.0639** | **0.0209** | **2.0000e-004** | **5.6200e-003** | **2.0000e-004** | **5.8200e-003** | **1.5300e-003** | **1.9000e-004** | **1.7200e-003** | **0.0000** | **18.9847** | **18.9847** | **1.2600e-003** | **0.0000** | **19.0161** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

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

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

### Mitigated Construction Off-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction On-Site

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

### Mitigated Construction Off-Site

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

## 3.6 Paving - 2024

### Unmitigated Construction On-Site

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

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

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

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

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 7.4800e-003 | 4.9300e-003 | 0.0596 | 1.9000e-004 | 0.0209 | 1.6000e-004 | 0.0211 | 5.5500e-003 | 1.5000e-004 | 5.7000e-003 | 0.0000 | 17.1287 | 17.1287 | 4.3000e-004 | 0.0000 | 17.1394 |
| **Total** | **7.4800e-003** | **4.9300e-003** | **0.0596** | **1.9000e-004** | **0.0209** | **1.6000e-004** | **0.0211** | **5.5500e-003** | **1.5000e-004** | **5.7000e-003** | **0.0000** | **17.1287** | **17.1287** | **4.3000e-004** | **0.0000** | **17.1394** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |
| Unmitigated | 1.5857 | 7.9962 | 19.1834 | 0.0821 | 7.7979 | 0.0580 | 7.8559 | 2.0895 | 0.0539 | 2.1434 | 0.0000 | 7,620.4986 | 7,620.4986 | 0.3407 | 0.0000 | 7,629.0162 |

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, 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 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 2,512.6465 | 2,512.6465 | 0.1037 | 0.0215 | 2,521.6356 |
| NaturalGas Mitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |
| NaturalGas Unmitigated | 0.1398 | 1.2312 | 0.7770 | 7.6200e-003 | | 0.0966 | 0.0966 | | 0.0966 | 0.0966 | 0.0000 | 1,383.4267 | 1,383.4267 | 0.0265 | 0.0254 | 1,391.6478 |

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

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

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

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

## 5.3 Energy by Land Use - Electricity

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Low Rise | 106010 | 33.7770 | 1.3900e-003 | 2.9000e-004 | 33.8978 |
| Apartments Mid Rise | 3.94697e+006 | 1,257.5879 | 0.0519 | 0.0107 | 1,262.0869 |
| General Office Building | 584550 | 186.2502 | 7.6900e-003 | 1.5900e-003 | 186.9165 |
| High Turnover (Sit Down Restaurant) | 1.58904e+006 | 506.3022 | 0.0209 | 4.3200e-003 | 508.1135 |
| Hotel | 550308 | 175.3399 | 7.2400e-003 | 1.5000e-003 | 175.9672 |
| Quality Restaurant | 353120 | 112.5116 | 4.6500e-003 | 9.6000e-004 | 112.9141 |
| Regional Shopping Center | 756000 | 240.8778 | 9.9400e-003 | 2.0600e-003 | 241.7395 |
| **Total** | | **2,512.6465** | **0.1037** | **0.0215** | **2,521.6356** |

# 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 | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |
| Unmitigated | 5.1437 | 0.2950 | 10.3804 | 1.6700e-003 | | 0.0714 | 0.0714 | | 0.0714 | 0.0714 | 0.0000 | 220.9670 | 220.9670 | 0.0201 | 3.7400e-003 | 222.5835 |

## 6.2 Area by SubCategory

**Unmitigated**

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

## 6.2 Area by SubCategory

**Mitigated**

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

# 7.0 Water Detail

## 7.1 Mitigation Measures Water

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

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

## 7.2 Water by Land Use

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Low Rise | 1.62885 / 1.02688 | 10.9095 | 0.0535 | 1.3400e-003 | 12.6471 |
| Apartments Mid Rise | 63.5252 / 40.0485 | 425.4719 | 2.0867 | 0.0523 | 493.2363 |
| General Office Building | 7.99802 / 4.90201 | 53.0719 | 0.2627 | 6.5900e-003 | 61.6019 |
| High Turnover (Sit Down Restaurant) | 10.9272 / 0.697482 | 51.2702 | 0.3580 | 8.8200e-003 | 62.8482 |
| Hotel | 1.26834 / 0.140927 | 6.1633 | 0.0416 | 1.0300e-003 | 7.5079 |
| Quality Restaurant | 2.42827 / 0.154996 | 11.3934 | 0.0796 | 1.9600e-003 | 13.9663 |
| Regional Shopping Center | 4.14806 / 2.54236 | 27.5250 | 0.1363 | 3.4200e-003 | 31.9490 |
| **Total** | | **585.8052** | **3.0183** | **0.0755** | **683.7567** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

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

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 8.2 Waste by Land Use

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Low Rise | 11.5 | 2.3344 | 0.1380 | 0.0000 | 5.7834 |
| Apartments Mid Rise | 448.5 | 91.0415 | 5.3804 | 0.0000 | 225.5513 |
| General Office Building | 41.85 | 8.4952 | 0.5021 | 0.0000 | 21.0464 |
| High Turnover (Sit Down Restaurant) | 428.4 | 86.9613 | 5.1393 | 0.0000 | 215.4430 |
| Hotel | 27.38 | 5.5579 | 0.3285 | 0.0000 | 13.7694 |
| Quality Restaurant | 7.3 | 1.4818 | 0.0876 | 0.0000 | 3.6712 |
| Regional Shopping Center | 58.8 | 11.9359 | 0.7054 | 0.0000 | 29.5706 |
| **Total** | | **207.8079** | **12.2811** | **0.0000** | **514.8354** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

| Equipment Type | Number |
|---|---|

## 11.0 Vegetation

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0956 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2561 | 46.4415 | 31.4494 | 0.0636 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,163.4166 | 6,163.4166 | 1.9475 | 0.0000 | 6,212.1039 |
| 2022 | 4.5441 | 38.8811 | 40.8776 | 0.1240 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,493.4403 | 12,493.4403 | 1.9485 | 0.0000 | 12,518.5707 |
| 2023 | 4.1534 | 25.7658 | 38.7457 | 0.1206 | 7.0088 | 0.7592 | 7.7679 | 1.8799 | 0.7136 | 2.5935 | 0.0000 | 12,150.4890 | 12,150.4890 | 0.9589 | 0.0000 | 12,174.4615 |
| 2024 | 237.0219 | 9.5478 | 14.9642 | 0.0239 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,313.1808 | 2,313.1808 | 0.7166 | 0.0000 | 2,331.0955 |
| **Maximum** | **237.0219** | **46.4415** | **40.8776** | **0.1240** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,493.4403** | **12,493.4403** | **1.9485** | **0.0000** | **12,518.5707** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1273 | 4.0952 | 0.9602 | 0.0119 | 0.2669 | 0.0126 | 0.2795 | 0.0732 | 0.0120 | 0.0852 | | 1,292.2413 | 1,292.2413 | 0.0877 | | 1,294.4337 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0487 | 0.0313 | 0.4282 | 1.1800e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 117.2799 | 117.2799 | 3.5200e-003 | | 117.3678 |
| **Total** | **0.1760** | **4.1265** | **1.3884** | **0.0131** | **0.3810** | **0.0135** | **0.3946** | **0.1034** | **0.0129** | **0.1163** | | **1,409.5212** | **1,409.5212** | **0.0912** | | **1,411.8015** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0584 | 0.0375 | 0.5139 | 1.4100e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 140.7359 | 140.7359 | 4.2200e-003 | | 140.8414 |
| **Total** | **0.0584** | **0.0375** | **0.5139** | **1.4100e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **140.7359** | **140.7359** | **4.2200e-003** | | **140.8414** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0649 | 0.0417 | 0.5710 | 1.5700e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 156.3732 | 156.3732 | 4.6900e-003 | | 156.4904 |
| **Total** | **0.0649** | **0.0417** | **0.5710** | **1.5700e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **156.3732** | **156.3732** | **4.6900e-003** | | **156.4904** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0607 | 0.0376 | 0.5263 | 1.5100e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 150.8754 | 150.8754 | 4.2400e-003 | | 150.9813 |
| **Total** | **0.0607** | **0.0376** | **0.5263** | **1.5100e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **150.8754** | **150.8754** | **4.2400e-003** | | **150.9813** |

## 3.5 Building Construction - 2022

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4079 | 13.2032 | 3.4341 | 0.0364 | 0.9155 | 0.0248 | 0.9404 | 0.2636 | 0.0237 | 0.2873 | | 3,896.5482 | 3,896.5482 | 0.2236 | | 3,902.1384 |
| Worker | 2.4299 | 1.5074 | 21.0801 | 0.0607 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 6,042.5585 | 6,042.5585 | 0.1697 | | 6,046.8000 |
| **Total** | **2.8378** | **14.7106** | **24.5142** | **0.0971** | **7.0087** | **0.0741** | **7.0828** | **1.8799** | **0.0691** | **1.9490** | | **9,939.1067** | **9,939.1067** | **0.3933** | | **9,948.9384** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3027 | 10.0181 | 3.1014 | 0.0352 | 0.9156 | 0.0116 | 0.9271 | 0.2636 | 0.0111 | 0.2747 | | 3,773.8762 | 3,773.8762 | 0.1982 | | 3,778.8300 |
| Worker | 2.2780 | 1.3628 | 19.4002 | 0.0584 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,821.4028 | 5,821.4028 | 0.1529 | | 5,825.2254 |
| **Total** | **2.5807** | **11.3809** | **22.5017** | **0.0936** | **7.0088** | **0.0595** | **7.0682** | **1.8799** | **0.0552** | **1.9350** | | **9,595.2790** | **9,595.2790** | **0.3511** | | **9,604.0554** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0427 | 0.0255 | 0.3633 | 1.0900e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 109.0150 | 109.0150 | 2.8600e-003 | | 109.0866 |
| **Total** | **0.0427** | **0.0255** | **0.3633** | **1.0900e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **109.0150** | **109.0150** | **2.8600e-003** | | **109.0866** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0403 | 0.0233 | 0.3384 | 1.0600e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 105.6336 | 105.6336 | 2.6300e-003 | | 105.6992 |
| **Total** | **0.0403** | **0.0233** | **0.3384** | **1.0600e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **105.6336** | **105.6336** | **2.6300e-003** | | **105.6992** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4296 | 0.2481 | 3.6098 | 0.0113 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,126.7583 | 1,126.7583 | 0.0280 | | 1,127.4583 |
| **Total** | **0.4296** | **0.2481** | **3.6098** | **0.0113** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,126.7583** | **1,126.7583** | **0.0280** | | **1,127.4583** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

# Village South Specific Plan (Proposed)

**Los Angeles-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

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

### 1.2 Other Project Characteristics

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

### 1.3 User Entered Comments & Non-Default Data

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

Project Characteristics - Consistent with the DEIR's model.

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

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

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

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

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

Energy Use -

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

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

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

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

## 2.0 Emissions Summary

## 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

## 2.1 Overall Construction (Maximum Daily Emission)

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2021 | 4.2621 | 46.4460 | 31.4068 | 0.0635 | 18.2032 | 2.0456 | 20.2488 | 9.9670 | 1.8820 | 11.8490 | 0.0000 | 6,154.3377 | 6,154.3377 | 1.9472 | 0.0000 | 6,203.0186 |
| 2022 | 4.7966 | 38.8851 | 39.6338 | 0.1195 | 8.8255 | 1.6361 | 10.4616 | 3.6369 | 1.5052 | 5.1421 | 0.0000 | 12,035.3440 | 12,035.3440 | 1.9482 | 0.0000 | 12,060.6013 |
| 2023 | 4.3939 | 25.8648 | 37.5031 | 0.1162 | 7.0088 | 0.7598 | 7.7685 | 1.8799 | 0.7142 | 2.5940 | 0.0000 | 11,710.4080 | 11,710.4080 | 0.9617 | 0.0000 | 11,734.4497 |
| 2024 | 237.0656 | 9.5503 | 14.9372 | 0.0238 | 1.2171 | 0.4694 | 1.2875 | 0.3229 | 0.4319 | 0.4621 | 0.0000 | 2,307.0517 | 2,307.0517 | 0.7164 | 0.0000 | 2,324.9627 |
| **Maximum** | **237.0656** | **46.4460** | **39.6338** | **0.1195** | **18.2032** | **2.0456** | **20.2488** | **9.9670** | **1.8820** | **11.8490** | **0.0000** | **12,035.3440** | **12,035.3440** | **1.9482** | **0.0000** | **12,060.6013** |

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

## 2.2 Overall Operational

### Unmitigated Operational

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

### Mitigated Operational

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

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

## 3.0 Construction Detail

**Construction Phase**

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

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 112.5**

**Acres of Paving: 0**

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

**OffRoad Equipment**

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

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 158 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 247 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

**Trips and VMT**

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

## 3.1 Mitigation Measures Construction

## 3.2 Demolition - 2021

**Unmitigated Construction On-Site**

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

## 3.2 Demolition - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

### Mitigated Construction On-Site

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

## 3.2 Demolition - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.1304 | 4.1454 | 1.0182 | 0.0117 | 0.2669 | 0.0128 | 0.2797 | 0.0732 | 0.0122 | 0.0854 | | 1,269.8555 | 1,269.8555 | 0.0908 | | 1,272.1252 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0532 | 0.0346 | 0.3963 | 1.1100e-003 | 0.1141 | 9.5000e-004 | 0.1151 | 0.0303 | 8.8000e-004 | 0.0311 | | 110.4707 | 110.4707 | 3.3300e-003 | | 110.5539 |
| **Total** | **0.1835** | **4.1800** | **1.4144** | **0.0128** | **0.3810** | **0.0137** | **0.3948** | **0.1034** | **0.0131** | **0.1165** | | **1,380.3262** | **1,380.3262** | **0.0941** | | **1,382.6791** |

## 3.3 Site Preparation - 2021

**Unmitigated Construction On-Site**

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

## 3.3 Site Preparation - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

### Mitigated Construction On-Site

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

## 3.3 Site Preparation - 2021

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0638 | 0.0415 | 0.4755 | 1.3300e-003 | 0.1369 | 1.1400e-003 | 0.1381 | 0.0363 | 1.0500e-003 | 0.0374 | | 132.5649 | 132.5649 | 3.9900e-003 | | 132.6646 |
| **Total** | **0.0638** | **0.0415** | **0.4755** | **1.3300e-003** | **0.1369** | **1.1400e-003** | **0.1381** | **0.0363** | **1.0500e-003** | **0.0374** | | **132.5649** | **132.5649** | **3.9900e-003** | | **132.6646** |

## 3.4 Grading - 2021

**Unmitigated Construction On-Site**

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

## 3.4 Grading - 2021

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2021

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0709 | 0.0462 | 0.5284 | 1.4800e-003 | 0.1521 | 1.2700e-003 | 0.1534 | 0.0404 | 1.1700e-003 | 0.0415 | | 147.2943 | 147.2943 | 4.4300e-003 | | 147.4051 |
| **Total** | **0.0709** | **0.0462** | **0.5284** | **1.4800e-003** | **0.1521** | **1.2700e-003** | **0.1534** | **0.0404** | **1.1700e-003** | **0.0415** | | **147.2943** | **147.2943** | **4.4300e-003** | | **147.4051** |

## 3.4 Grading - 2022

### Unmitigated Construction On-Site

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

## 3.4 Grading - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

### Mitigated Construction On-Site

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

## 3.4 Grading - 2022

### Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0665 | 0.0416 | 0.4861 | 1.4300e-003 | 0.1521 | 1.2300e-003 | 0.1534 | 0.0404 | 1.1300e-003 | 0.0415 | | 142.1207 | 142.1207 | 4.0000e-003 | | 142.2207 |
| **Total** | **0.0665** | **0.0416** | **0.4861** | **1.4300e-003** | **0.1521** | **1.2300e-003** | **0.1534** | **0.0404** | **1.1300e-003** | **0.0415** | | **142.1207** | **142.1207** | **4.0000e-003** | | **142.2207** |

## 3.5 Building Construction - 2022

### Unmitigated Construction On-Site

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

## 3.5 Building Construction - 2022

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2022

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.4284 | 13.1673 | 3.8005 | 0.0354 | 0.9155 | 0.0256 | 0.9412 | 0.2636 | 0.0245 | 0.2881 | | 3,789.0750 | 3,789.0750 | 0.2381 | | 3,795.0283 |
| Worker | 2.6620 | 1.6677 | 19.4699 | 0.0571 | 6.0932 | 0.0493 | 6.1425 | 1.6163 | 0.0454 | 1.6617 | | 5,691.9354 | 5,691.9354 | 0.1602 | | 5,695.9408 |
| **Total** | **3.0904** | **14.8350** | **23.2704** | **0.0926** | **7.0087** | **0.0749** | **7.0836** | **1.8799** | **0.0699** | **1.9498** | | **9,481.0104** | **9,481.0104** | **0.3984** | | **9,490.9691** |

## 3.5 Building Construction - 2023

**Unmitigated Construction On-Site**

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

## 3.5 Building Construction - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

### Mitigated Construction On-Site

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

## 3.5 Building Construction - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.3183 | 9.9726 | 3.3771 | 0.0343 | 0.9156 | 0.0122 | 0.9277 | 0.2636 | 0.0116 | 0.2752 | | 3,671.4007 | 3,671.4007 | 0.2096 | | 3,676.6417 |
| Worker | 2.5029 | 1.5073 | 17.8820 | 0.0550 | 6.0932 | 0.0479 | 6.1411 | 1.6163 | 0.0441 | 1.6604 | | 5,483.7974 | 5,483.7974 | 0.1442 | | 5,487.4020 |
| **Total** | **2.8211** | **11.4799** | **21.2591** | **0.0893** | **7.0088** | **0.0601** | **7.0688** | **1.8799** | **0.0557** | **1.9356** | | **9,155.1981** | **9,155.1981** | **0.3538** | | **9,164.0437** |

## 3.6 Paving - 2023

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2023

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2023

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0469 | 0.0282 | 0.3349 | 1.0300e-003 | 0.1141 | 9.0000e-004 | 0.1150 | 0.0303 | 8.3000e-004 | 0.0311 | | 102.6928 | 102.6928 | 2.7000e-003 | | 102.7603 |
| **Total** | **0.0469** | **0.0282** | **0.3349** | **1.0300e-003** | **0.1141** | **9.0000e-004** | **0.1150** | **0.0303** | **8.3000e-004** | **0.0311** | | **102.6928** | **102.6928** | **2.7000e-003** | | **102.7603** |

## 3.6 Paving - 2024

**Unmitigated Construction On-Site**

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

## 3.6 Paving - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

### Mitigated Construction On-Site

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

## 3.6 Paving - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.0444 | 0.0257 | 0.3114 | 1.0000e-003 | 0.1141 | 8.8000e-004 | 0.1150 | 0.0303 | 8.1000e-004 | 0.0311 | | 99.5045 | 99.5045 | 2.4700e-003 | | 99.5663 |
| **Total** | **0.0444** | **0.0257** | **0.3114** | **1.0000e-003** | **0.1141** | **8.8000e-004** | **0.1150** | **0.0303** | **8.1000e-004** | **0.0311** | | **99.5045** | **99.5045** | **2.4700e-003** | | **99.5663** |

## 3.7 Architectural Coating - 2024

**Unmitigated Construction On-Site**

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

## 3.7 Architectural Coating - 2024

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

### Mitigated Construction On-Site

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

### 3.7 Architectural Coating - 2024

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | | 0.0000 |
| Worker | 0.4734 | 0.2743 | 3.3220 | 0.0107 | 1.2171 | 9.4300e-003 | 1.2266 | 0.3229 | 8.6800e-003 | 0.3315 | | 1,061.3818 | 1,061.3818 | 0.0264 | | 1,062.0410 |
| **Total** | **0.4734** | **0.2743** | **3.3220** | **0.0107** | **1.2171** | **9.4300e-003** | **1.2266** | **0.3229** | **8.6800e-003** | **0.3315** | | **1,061.3818** | **1,061.3818** | **0.0264** | | **1,062.0410** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

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

## 4.3 Trip Type Information

| | 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 Low Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| General Office Building | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 77 | 19 | 4 |
| High Turnover (Sit Down | 16.60 | 8.40 | 6.90 | 8.50 | 72.50 | 19.00 | 37 | 20 | 43 |
| Hotel | 16.60 | 8.40 | 6.90 | 19.40 | 61.60 | 19.00 | 58 | 38 | 4 |
| Quality Restaurant | 16.60 | 8.40 | 6.90 | 12.00 | 69.00 | 19.00 | 38 | 18 | 44 |
| Regional Shopping Center | 16.60 | 8.40 | 6.90 | 16.30 | 64.70 | 19.00 | 54 | 35 | 11 |

### 4.4 Fleet Mix

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

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

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

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

## 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1119.16 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35784.3 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1283.42 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22759.9 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4769.72 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5057.75 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 251.616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

## 5.2 Energy by Land Use - NaturalGas

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | lb/day | | | | | | | | | | lb/day | | | | | |
| Apartments Low Rise | 1.11916 | 0.0121 | 0.1031 | 0.0439 | 6.6000e-004 | | 8.3400e-003 | 8.3400e-003 | | 8.3400e-003 | 8.3400e-003 | | 131.6662 | 131.6662 | 2.5200e-003 | 2.4100e-003 | 132.4486 |
| Apartments Mid Rise | 35.7843 | 0.3859 | 3.2978 | 1.4033 | 0.0211 | | 0.2666 | 0.2666 | | 0.2666 | 0.2666 | | 4,209.9164 | 4,209.9164 | 0.0807 | 0.0772 | 4,234.9339 |
| General Office Building | 1.28342 | 0.0138 | 0.1258 | 0.1057 | 7.5000e-004 | | 9.5600e-003 | 9.5600e-003 | | 9.5600e-003 | 9.5600e-003 | | 150.9911 | 150.9911 | 2.8900e-003 | 2.7700e-003 | 151.8884 |
| High Turnover (Sit Down Restaurant) | 22.7599 | 0.2455 | 2.2314 | 1.8743 | 0.0134 | | 0.1696 | 0.1696 | | 0.1696 | 0.1696 | | 2,677.6342 | 2,677.6342 | 0.0513 | 0.0491 | 2,693.5460 |
| Hotel | 4.76972 | 0.0514 | 0.4676 | 0.3928 | 2.8100e-003 | | 0.0355 | 0.0355 | | 0.0355 | 0.0355 | | 561.1436 | 561.1436 | 0.0108 | 0.0103 | 564.4782 |
| Quality Restaurant | 5.05775 | 0.0545 | 0.4959 | 0.4165 | 2.9800e-003 | | 0.0377 | 0.0377 | | 0.0377 | 0.0377 | | 595.0298 | 595.0298 | 0.0114 | 0.0109 | 598.5658 |
| Regional Shopping Center | 0.251616 | 2.7100e-003 | 0.0247 | 0.0207 | 1.5000e-004 | | 1.8700e-003 | 1.8700e-003 | | 1.8700e-003 | 1.8700e-003 | | 29.6019 | 29.6019 | 5.7000e-004 | 5.4000e-004 | 29.7778 |
| **Total** | | **0.7660** | **6.7463** | **4.2573** | **0.0418** | | **0.5292** | **0.5292** | | **0.5292** | **0.5292** | | **8,355.9832** | **8,355.9832** | **0.1602** | **0.1532** | **8,405.6387** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

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

## 6.2 Area by SubCategory

**Unmitigated**

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

### 6.2 Area by SubCategory

**Mitigated**

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

## 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

Attachment C

| Local Hire Provision Net Change | |
|---|---|
| **Without Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,623 |
| Amortized (MT CO2e/year) | 120.77 |
| **With Local Hire Provision** | |
| Total Construction GHG Emissions (MT CO2e) | 3,024 |
| Amortized (MT CO2e/year) | 100.80 |
| ***% Decrease in Construction-related GHG Emissions*** | ***17%*** |

**EXHIBIT B**

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

**SOIL WATER AIR PROTECTION ENTERPRISE**
2656 29th Street, Suite 201
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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.

## 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

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## 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.

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**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.

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**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.

**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 Conferenc*e. 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.

**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

## 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

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

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

**EXHIBIT C**

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Santa Monica, California 90401
Tel: (949) 887-9013
Email: mhagemann@swape.com

## Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization**
**Industrial Stormwater Compliance**
**Investigation and Remediation Strategies**
**Litigation Support and Testifying Expert**
**CEQA Review**

**Education:**

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

**Professional Certifications:**

California Professional Geologist
California Certified Hydrogeologist
Qualified SWPPP Developer and Practitioner

**Professional Experience:**

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

**Senior Regulatory and Litigation Support Analyst:**

With SWAPE, Matt's responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt's duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

**Executive Director:**

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

**Hydrogeology:**

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**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.

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.

**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.

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**Other Experience:**

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

**EXHIBIT D**

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March 3, 2022

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**Subject: Comments on the Victoria Boulevard Apartments Project (SCH No. 2021070304)**

Dear Mr. Cohen,

We have reviewed the January 2023 Draft Environmental Impact Report ("DEIR") for the Victoria Boulevard Apartments Project ("Project") located in the City of Dana Point ("City"). The Project proposes to construct 349 dwelling units and 681 parking spaces on the 5.51-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. A revised Environmental Impact Report ("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 environment.

O2-3

# Air Quality

## Unsubstantiated Input Parameters Used to Estimate Project Emissions

The DEIR's air quality analysis relies on emissions calculated with the California Emissions Estimator Model ("CalEEMod") Version 2020.4.0 (p. 5.8-15).[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 be justified by substantial evidence.

O2-4

[1] "CalEEMod Version 2020.4.0." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/download-model.

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 the Air Quality/Greenhouse Gas Emissions/Energy Data ("AQ & GHG Analysis") as Appendix 11.8 to the DEIR, we found that several model inputs were not consistent with information disclosed in the DEIR. As a result, model inputs were unreasonable to apply to the Project and the Project's construction and operational emissions are underestimated. A revised 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.

### *Unsubstantiated Reductions to Architectural and Area Coating Emission Factors*

Review of the CalEEMod output files demonstrates that the "Victoria Blvd Apt" model includes several reductions to the default architectural and area coating emission factors (see excerpt below) (Appendix 11.8, pp. 4, 41, 71).

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | EF_Nonresidential_Exterior | 100.00 | 50.00 |
| tblArchitecturalCoating | EF_Nonresidential_Interior | 100.00 | 50.00 |
| tblArchitecturalCoating | EF_Parking | 100.00 | 50.00 |
| tblAreaCoating | Area_EF_Nonresidential_Exterior | 100 | 50 |
| tblAreaCoating | Area_EF_Nonresidential_Interior | 100 | 50 |
| tblAreaCoating | Area_EF_Parking | 100 | 50 |

O2-4

As demonstrated above, the nonresidential exterior, nonresidential interior, and parking architectural and area coating emission factors are reduced from the default values of 100- to 50-grams per liter ("g/L"). As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[2] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Per SCAQMD Rule 1113" (Appendix 11.8, pp. 4, 41, 71).

Furthermore, regarding South Coast Air Quality Management District ("SCAQMD") Rule 1113, the DEIR states:

> "As required by SCAQMD Rule 1113, all architectural coatings for the proposed structures would comply with specifications on painting practices as well as regulation on the ROG content of paint" (p. 5.8-16).

[2] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.

However, these reductions remain unsubstantiated, as we cannot verify the accuracy of the revised architectural and area coating emission factors based on SCAQMD Rule 1113 alone. The SCAQMD Rule 1113 Table of Standards provides the required VOC limits (grams of VOC per liter of coating) for 57 different coating categories.[3] The VOC limits for each coating varies from a minimum value of 50 g/L to a maximum value of 730 g/L. As such, we cannot verify that SCAQMD Rule 1113 substantiates reductions to the default coating values without more information regarding what category of coating will be used. As the DEIR and associated documents fail to explicitly require the use of a specific type of coating, we are unable to verify the revised emission factors assumed in the model.

O2-4 cont'd

These unsubstantiated reductions present an issue, as CalEEMod uses the architectural and area coating emission factors to calculate the Project's reactive organic gas/volatile organic compound ("ROG"/"VOC") emissions.[4] By including unsubstantiated reductions to the default architectural and area coating emission factors, the models may underestimate the Project's construction-related and ROG/VOC emissions and should not be relied upon to determine Project significance.

### *Unsubstantiated Changes to Individual Construction Phase Lengths*

Review of the CalEEMod output files demonstrates that the "Victoria Blvd Apt" model includes several changes to the default individual construction phase lengths (see excerpt below) (Attachment 11.8, pp. 4, 41, 71).

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblConstructionPhase | NumDays | 230.00 | 528.00 |
| tblConstructionPhase | NumDays | 20.00 | 33.00 |
| tblConstructionPhase | NumDays | 20.00 | 66.00 |

O2-5

As a result of these changes, the model includes the following construction schedule (see excerpt below) (Attachment 11.8, pp. 10, 11, 47, 77).

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days |
|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 1/1/2024 | 2/14/2024 | 5 | 33 |
| 2 | Grading | Grading | 2/15/2024 | 4/16/2024 | 5 | 44 |
| 3 | Building Construction | Building Construction | 4/17/2024 | 4/24/2026 | 5 | 528 |
| 4 | Paving | Paving | 6/1/2025 | 7/16/2025 | 5 | 33 |
| 5 | Architectural Coating | Architectural Coating | 10/1/2025 | 12/31/2025 | 5 | 66 |

[3] SCAQMD Rule 1113 Advisory Notice." SCAQMD, February 2016, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1113.pdf?sfvrsn=24, p. 1113-14, Table of Standards 1.

[4] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 35, 40.

As demonstrated above, the demolition phase is increased by 65%, from the default value of 20 to 33 days; the grading phase is increased by 120%, from the default value of 20 to 44 days; the building construction phase is increased by 130%, from the default values of 230 to 528 days; the paving phase is increased by 65%, from the default values of 20 to 33 days; and the architectural coating phase is increased by 230%, from the default value of 20 to 66 days. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[5] According to the "User Entered Comments & Non-Default Data" table, the justification provided for these changes is:

> "Per AQ Questionnaire" (Attachment E, pp. 147, 182, 439).

However, the changes to the individual construction phase lengths remain unsubstantiated as the DEIR fails to provide the purported "AQ Questionnaire" as cited above. This is incorrect, as the CalEEMod User's Guide states that all changes must be substantiated (see excerpt below).

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA." [6]

O2-5 cont'd

As such, until the "AQ Questionnaire" is made available, we are unable to verify the revised individual construction phase lengths as included in the model.

These unsubstantiated changes present an issue, as the construction emissions are improperly spread out over a longer period of time for some phases, but not for others. According to the CalEEMod User's Guide, each construction phase is associated with different emissions activities (see excerpt below).[7]

> ***Demolition*** involves removing buildings or structures.
>
> ***Site Preparation*** involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
>
> ***Grading*** involves the cut and fill of land to ensure that the proper base and slope is created for the foundation.
>
> ***Building Construction*** involves the construction of the foundation, structures and buildings.
>
> ***Architectural Coating*** involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.
>
> ***Paving*** involves the laying of concrete or asphalt such as in parking lots, roads, driveways, or sidewalks.

By disproportionately altering and extending some of the individual construction phase lengths without proper justification, the model assumes there are a greater number of days to complete the

[5] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 1, 14.
[6] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.
[7] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 32.

construction activities required by the prolonged phases. As a result, there will be less construction activities required per day and, consequently, less pollutants emitted per day. Therefore, the model may underestimate the peak daily emissions associated with some phases of construction and should not be relied upon to determine Project significance.

O2-5 cont'd

### *Unsubstantiated Changes to Off-Road Equipment Unit Amounts and Equipment Types*

Review of the CalEEMod output files demonstrates that the "Victoria Blvd Apt" model includes several changes to the default off-road construction equipment types and unit amounts (see excerpt below) (Attachment 11.8, pp. 5, 42, 72).

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblOffRoadEquipment | OffRoadEquipmentType | Concrete/Industrial Saws | Pavers |
| tblOffRoadEquipment | OffRoadEquipmentType | Cranes | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | Forklifts | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | Generator Sets | Rubber Tired Loaders |
| tblOffRoadEquipment | OffRoadEquipmentType | Pavers | Graders |
| tblOffRoadEquipment | OffRoadEquipmentType | Rollers | Signal Boards |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Rubber Tired Loaders |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Rollers |
| tblOffRoadEquipment | OffRoadEquipmentType | Tractors/Loaders/Backhoes | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentType | Rubber Tired Dozers | Rubber Tired Loaders |
| tblOffRoadEquipment | OffRoadEquipmentType | | Scrapers |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 1.00 |

O2-6

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[8] According to the "User Entered Comments & Non-Default Data" table, the justification provided for this change is:

> "[P]er AQ Questionnaire" (Attachment 11.8, pp. 3, 40, 70).

However, the changes to the off-road construction equipment types and unit amounts are unsubstantiated. As previously discussed, the DEIR fails to provide the purported "AQ Questionnaire" as cited above. This is incorrect, as the CalEEMod User's Guide states that all changes must be substantiated (see excerpt below):

> "CalEEMod was also designed to allow the user to change the defaults to reflect site- or project-specific information, when available, provided that the information is supported by substantial evidence as required by CEQA." [9]

[8] "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. 2, 9

[9] "CalEEMod User's Guide." California Air Pollution Control Officers Association (CAPCOA), May 2021, *available at:* https://www.aqmd.gov/caleemod/user's-guide, p. 13, 14.

As such, until the "AQ Questionnaire" is made available, we are unable to verify the revised off-road construction equipment types and unit amounts as included in the model.

These unsubstantiated changes present an issue, as CalEEMod uses the off-road equipment unit amounts to calculate the emissions associated with off-road construction equipment.[10] By including unsubstantiated changes to the default off-road construction equipment unit amounts, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

O2-6 cont'd

## Diesel Particulate Matter Emissions Inadequately Evaluated

The DEIR concludes that the Project would have a less-than-significant construction-related health risk impact based on a Localized Significance Threshold ("LST") analysis (see table below) (p. 5.8-22, Table 5.8-6).

**Table 5.8-6**
**Construction Localized Significance Emissions Summary**

| Phase | Emissions (pounds per day)[5] | | | |
|---|---|---|---|---|
| | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Year 1[1] | **33.42** | **24.40** | **2.68** | **1.33** |
| Year 2[2] | 13.13 | 10.29 | 0.50 | 0.46 |
| Year 3[3] | 13.13 | 10.29 | 0.50 | 0.46 |
| **Maximum Daily Emissions[3]** | **33.42** | **24.40** | **2.68** | **1.33** |
| *SCAQMD Localized Threshold[4]* | *131* | *993* | *6* | *4* |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** |

Notes: $NO_X$ = nitrous oxide; CO = carbon monoxide; $PM_{10}$ = particulate matter smaller than 10 microns; $PM_{2.5}$ = particulate matter smaller than 2.5 microns

1. The highest on-site $NO_X$, CO, $PM_{2.5}$, and $PM_{10}$ emissions are grading during Year 1.
2. The highest on-site $NO_X$, CO, $PM_{2.5}$, and $PM_{10}$ emissions are building construction during Year 2.
3. The highest on-site $NO_X$, CO, $PM_{2.5}$, and $PM_{10}$ emissions are building construction during Year 3.
4. The Localized Significance Threshold was determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$. The Localized Significance Threshold conservatively uses the two-acre threshold, the distance to sensitive receptors (25 meters), and the source receptor area (SRA 21).
5. The emissions data modeled in CalEEMod is with the implementation of SCAQMD Rule 403. The mitigation includes the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; water all haul roads three times daily; and limit speeds on unpaved roads to 15 miles per hour.

Refer to Appendix 11.8 for assumptions used in this analysis.

O2-7

Furthermore, regarding the health risk impacts associated with Project operation, the DEIR states:

> "According to SCAQMD localized significance threshold methodology, LSTs would apply to the project operation if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). Occasional truck deliveries for packages etc., and trash pickup (once per week) would occur at the project. These truck delivery/trash pickup activities would be intermittent and would not include extended periods of idling time; therefore, idling emissions from truck deliveries would be minimal. Thus, due to the lack of such emissions, no long-term localized significance threshold analysis is needed. Operational LST impacts would be less than significant in this regard" (p. 5.8-22).

[10] "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. 32

As stated above, the DEIR claims that as the Project would only generate limited truck idling and activity, operation of the Project would not result in a significant health risk impact. However, the DEIR's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

First, the use of a Localized Significance Threshold ("LST") analysis to determine the health risk impacts posed to nearby, existing sensitive receptors as a result of the Project's construction-related TAC emissions is incorrect. While the LST method assesses the impact of pollutants at a local level, it only evaluates impacts from criteria air pollutants. According to the *Final Localized Significance Threshold Methodology* document prepared by the South Coast Air Quality Management District ("SCAQMD"), LST analyses are only applicable to $NO_x$, CO, $PM_{10}$, and $PM_{2.5}$ emissions, which are collectively referred to as criteria air pollutants.[11] Because LST methods can only be applied to criteria air pollutants, they cannot be used to determine whether emissions from TACs, specifically DPM, a known human carcinogen, would result in a significant health risk impact to nearby sensitive receptors. As a result, health impacts from exposure to TACs, such as DPM, were not analyzed, thus leaving a gap in the DEIR's analysis.

Second, by failing to prepare a quantified construction and operational health risk analysis ("HRA"), the Project is inconsistent with CEQA's requirement to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." [12] This poses a problem, as construction of the Project would produce DPM emissions through the exhaust stacks of construction equipment over a duration of approximately 28 months (p. 3-21). Furthermore, the DEIR indicates that operation of the Project is anticipated to generate 2,518 net daily vehicle trips, which would produce additional exhaust emissions and continue to expose nearby, existing sensitive receptors to DPM emissions (p. 5.8-17). However, the DEIR fails to evaluate the TAC emissions associated with Project construction and operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's TAC emissions to the potential health risks posed to nearby receptors, the DEIR is inconsistent with CEQA's requirement to correlate Project-generated emissions with 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.[13] This guidance document describes the types of projects that warrant the preparation of an HRA. Specifically,

O2-7 cont'd

[11] "Final Localized Significance Threshold Methodology." South Coast Air Quality Management District (SCAQMD), Revised July 2008, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf.

[12] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.

[13] "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

OEHHA recommends that all short-term projects lasting at least 2 months assess cancer risks.[14] Furthermore, according to OEHHA:

> "Exposure from projects lasting more than 6 months should be evaluated for the duration of the project. In all cases, for assessing risk to residential receptors, the exposure should be assumed to start in the third trimester to allow for the use of the ASFs (OEHHA, 2009)."[15]

As the Project's anticipated construction duration exceeds the 2-month and 6-month requirements set forth by OEHHA, construction of the Project meets the threshold warranting a quantified HRA under OEHHA guidance and should be evaluated for the entire 28-month construction period. Furthermore, OEHHA recommends that an exposure duration of 30 years should be used to estimate the individual cancer risk at the maximally exposed individual resident ("MEIR").[16] While the Project documents fail to provide the expected lifetime of the proposed Project, we can reasonably assume that the Project would operate for at least 30 years, if not more. Therefore, operation of the Project also exceeds the 2-month and 6-month requirements set forth by OEHHA and should be evaluated for the entire 30-year residential exposure duration, as indicated by OEHHA guidance. These recommendations reflect the most recent state health risk policies, and as such, a revised EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions.

O2-7 cont'd

Fourth, without conducting a quantified construction or operational HRA for nearby, existing sensitive receptors, the DEIR fails to compare the Project's excess cancer risk to the SCAQMD's specific numeric threshold of 10 in one million.[17] Thus, in accordance with the most relevant guidance, an assessment of the health risk posed to nearby, existing receptors as a result of Project construction and operation should be conducted.

## Screening-Level Analysis Demonstrates 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.[18] As discussed above, the model replaced SCREEN3, and AERSCREEN is included in the OEHHA and the California Air Pollution Control Officers Associated ("CAPCOA") guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs").[19, 20] A

O2-8

[14] "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, p. 8-18.
[15] "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, p. 8-18.
[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, p. 2-4.
[17] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.
[18] "AERSCREEN Released as the EPA Recommended Screening Model," U.S. EPA, April 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[19] "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.
[20] "Health Risk Assessments for Proposed Land Use Projects." CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

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 construction and operational health risk impact to residential sensitive receptors using the annual $PM_{10}$ exhaust estimates from the DEIR's CalEEMod output files. Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life.[21] The DEIR's CalEEMod model indicates that construction activities will generate approximately 383 pounds of DPM over the 844-day construction period.[22] The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{382.7\ lbs}{844\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00238\ g/s}$$

O2-8 cont'd

Using this equation, we estimated a construction emission rate of 0.00238 grams per second ("g/s"). Subtracting the 844-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 27.7 years. The DEIR's CalEEMod emissions indicate that operational activities will generate approximately 97 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{97.4\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.000140\ g/s}$$

Using this equation, we estimated an operational emission rate of 0.000140 g/s. Construction and operation were simulated as a 5.51-acre rectangular area source in AERSCREEN, with approximate dimensions of 211- by 106-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 population of Dana Point was obtained from U.S. 2021 Census data.[23]

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The U.S. EPA suggests that the annualized average concentration of an air

[21] "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, p. 8-18.
[22] See Attachment A for health risk calculations.
[23] "Dana Point." U.S. Census Bureau, 2021, *available at:* https://datacommons.org/place/geoId/0617946.

pollutant be estimated by multiplying the single-hour concentration by 10% in screening procedures.[24] According to the DEIR the nearest sensitive receptor is located approximately 70 feet, or 21 meters, from the Project site (p. 5.8-21). However, review of the AERSCREEN output files demonstrates that the *maximally* exposed individual receptor ("MEIR") is located approximately 100 meters from the Project site. Thus, the single-hour concentration estimated by AERSCREEN for Project construction is approximately 3.870 µg/m$^3$ DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.3870 µg/m$^3$ for Project construction at the MEIR. For Project operation, the single-hour concentration estimated by AERSCREEN is 2.276 µg/m$^3$ DPM at approximately 100 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.2276 µg/m$^3$ for Project operation at the MEIR.[25]

O2-8 cont'd

We calculated the excess cancer risk to the MEIR using applicable HRA methodologies prescribed by OEHHA, as recommended by SCAQMD.[26] Specifically, guidance from OEHHA and the CARB recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95$^{th}$ percentile) breathing rates and age sensitivity factors ("ASF") in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters, such as the daily breathing rates ("BR/BW"), exposure duration ("ED"), age sensitivity factors ("ASF"), fraction of time at home ("FAH"), and exposure frequency ("EF") utilized for the various age groups in our screening-level HRA are as follows:

[24] "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised." U.S. EPA, October 1992, *available at:* http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf.
[25] See Attachment B for AERSCREEN output files.
[26] "AB 2588 and Rule 1402 Supplemental Guidelines." SCAQMD, October 2020, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 2.

| Exposure Assumptions for Residential Individual Cancer Risk | | | | | | |
|---|---|---|---|---|---|---|
| **Age Group** | **Breathing Rate** (L/kg-day)[27] | **Age Sensitivity Factor**[28] | **Exposure Duration** (years) | **Fraction of Time at Home**[29] | **Exposure Frequency** (days/year)[30] | **Exposure Time** (hours/day) |
| 3rd Trimester | 361 | 10 | 0.25 | 1 | 350 | 24 |
| Infant (0 - 2) | 1090 | 10 | 2 | 1 | 350 | 24 |
| Child (2 - 16) | 572 | 3 | 14 | 1 | 350 | 24 |
| Adult (16 - 30) | 261 | 1 | 14 | 0.73 | 350 | 24 |

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor ("CPF") in units of inverse dose expressed in milligrams per kilogram per day ($mg/kg/day^{-1}$) to derive the cancer risk estimate. Therefore, to assess exposures, we utilized the following dose algorithm:

O2-8 cont'd

$$Dose_{AIR,per\ age\ group} = C_{air} \times EF \times \left[\frac{BR}{BW}\right] \times A \times CF$$

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
$C_{air}$ = concentration of contaminant in air (µg/m3)
EF = exposure frequency (number of days/365 days)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)
A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

[27] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act." SCAQMD, October 2020, available at: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19, p. 19; see also "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.

[28] "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, p. 8-5 Table 8.3.

[29] "Risk Assessment Procedures." SCAQMD, August 2017, available at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1401/riskassessmentprocedures_2017_080717.pdf, p. 7.

[30] "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, p. 5-24.

where:

$Dose_{AIR}$ = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific $(mg/kg/day)^{-1}$
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

Consistent with the 844-day construction schedule, the annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years), the entire infantile (0 – 2) stage of life, and the first 0.06 years of the child (2 – 16) stage of life. The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 13.94 years of the child stage of life as well as the entire adult (16 – 30 years) stage of life. The results of our calculations are shown in the table below.

**The Maximally Exposed Individual at an Existing Residential Receptor**

| Age Group | Emissions Source | **Duration** (years) | **Concentration** (ug/m3) | Cancer Risk |
|---|---|---|---|---|
| 3rd Trimester | Construction | 0.25 | 0.3870 | 5.26E-06 |
| Infant (0 - 2) | Construction | 2 | 0.3870 | 1.27E-04 |
| | *Construction* | *0.06* | *0.3870* | *6.24E-07* |
| | *Operation* | *13.94* | *0.2276* | *8.20E-05* |
| Child (2 - 16) | Total | 14 | | 8.26E-05 |
| Adult (16 - 30) | Operation | 14 | 0.2276 | 9.15E-06 |
| **Lifetime** | | **30** | | **2.24E-04** |

O2-8 cont'd

As demonstrated in the table above, the excess cancer risks for the 3rd trimester of pregnancy, infants, children, and adults at the MEIR located approximately 100 meters away, over the course of Project construction and operation, are approximately 5.26, 127, 82.6, and 9.15 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years) is approximately 224 in one million. The infant, child, and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the DEIR.

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 HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA:

> "EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).
>
> In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).
>
> The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

O2-8 cont'd

As demonstrated above, screening-level analyses warrant further evaluation in a refined modeling approach. Thus, as our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, a revised CEQA analysis should be prepared to include a refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation. If the refined analysis similarly concludes that the Project would result in a significant health risk impact, then mitigation measures should be incorporated, as described below in the "Feasible Mitigation Measures Available to Reduce Emissions" section.

## Greenhouse Gas

### Failure to Adequately Evaluate Greenhouse Gas Impacts

The DEIR estimates that the Project would generate net annual GHG emissions of 2,874.50 metric tons of carbon dioxide equivalents per year ("MT $CO_2e$/year") (see table below) (p. 5.9-15, Table 5.9-1).

O2-9

**Table 5.9-1**
**Project Annual Greenhouse Gas Emissions**

| Source | $CO_2$ | $CH_4$ | | $N_2O$ | | Total Metric Tons of $CO_2e$ |
|---|---|---|---|---|---|---|
| | Metric Tons/year[1] | Metric Tons/year[1] | Metric Tons of $CO_2e$[2] | Metric Tons/year[1] | Metric Tons of $CO_2e$[2] | |
| **Direct Emissions[4]** | | | | | | |
| Construction (amortized over 30 years) | 85.29 | 0.01 | 0.31 | <0.01 | 1.25 | 86.85 |
| Area Source | 81.32 | 0.01 | 0.18 | <0.01 | 0.41 | 81.91 |
| Mobile Source | 1,908.45 | 0.12 | 2.90 | 0.08 | 23.90 | 1,935.28 |
| ***Total Direct Emissions[3,5]*** | ***2,075.07*** | ***0.14*** | ***3.38*** | ***0.09*** | ***25.56*** | ***2,104.05*** |
| **Indirect Emissions[4]** | | | | | | |
| Energy | 594.57 | 0.03 | 0.77 | 0.01 | 1.80 | 597.09 |
| Solid Waste | 16.32 | 0.96 | 24.10 | 0.00 | 0.00 | 40.44 |
| Water Demand | 113.53 | 0.60 | 15.00 | 0.01 | 4.40 | 132.92 |
| ***Total Indirect Emissions[3]*** | ***724.42*** | ***1.59*** | ***39.87*** | ***0.02*** | ***6.20*** | ***770.45*** |
| ***Total Project-Related Emissions[3]*** | | | ***2,874.50 $MTCO_2e$/year*** | | | |

Notes:
1. Emissions calculated using California Emissions Estimator Model Version 2020.4.0 (CalEEMod) computer model.
2. $CO_2$ Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed December 16, 2022.
3. Totals may be slightly off due to rounding.
4. Emission reductions applied in the CalEEMod model, or "mitigated emission", include regulatory requirements such as compliance with the 2019 Title 24 Building Standards Code, the 2019 CALGreen Code, and AB 341. These mandatory regulatory requirements would include high building energy efficiency, low flow plumbing fixtures, and solid waste diversion.

Refer to Appendix 11.8, for detailed model input/output data.

O2-9 cont'd

However, the DEIR does not rely on a quantifiable GHG emissions threshold. Instead, the DEIR relies on Project consistency with CARB's 2017 *Scoping Plan* and SCAG's *RTP/SCS* in order to conclude that the Project would have a less-than-significant GHG impact (p. 5.9-17 – 5.9-23). However, the DEIR's analysis, as well as the subsequent less-than-significant impact conclusion, is incorrect for four reasons.

(1) The DEIR's quantitative analysis relies upon a flawed air model;
(2) The DEIR's unsubstantiated air model indicates a potentially significant impact;
(3) The DEIR fails to consider performance-based standards under CARB's 2017 *Scoping Plan*; and
(4) The DEIR fails to consider 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 2,874.50 $MTCO_2e$ (p. 5.9-15, Table 5.9-1). However, the DEIR's quantitative analysis is unsubstantiated. As previously discussed, when reviewing the Project's CalEEMod models, provided in the AQ & GHG Analysis, we found that several of the values inputted into the models are not consistent with information disclosed in the DEIR. As a result, the models may underestimate the Project's emissions, and the DEIR's quantitative analysis should not be relied upon to determine Project significance. A revised EIR should be prepared that adequately assesses the potential GHG impacts that construction and operation of the proposed Project may have on the environment.

O2-10

### *2) Failure to Identify a Potentially Significant GHG Impact*

In an effort to determine the significance of the Project's GHG impacts, we recommend comparing the Project's GHG emissions estimates to the SCAQMD 2035 efficiency target of 3.0 metric tons of carbon dioxide equivalents per service population per year ("MT $CO_2e$/SP/year"), which was calculated by

O2-11

applying a 40% reduction to the 2020 targets.[31] When applying this threshold, the Project's incorrect and unsubstantiated air model indicates a potentially significant GHG impact.

As previously stated, the DEIR estimates that the Project would generate net annual GHG emissions of 2,874.50 $MTCO_2e$ (p. 5.9-15, Table 5.9-1). According to CAPCOA's *CEQA & Climate Change* report, a service population ("SP") is defined as "the sum of the number of residents and the number of jobs supported by the project."[32] The DEIR estimates that the project would support 796 residents, and no new jobs (p. 5.12-6, 5.12-8). As such, we estimate an SP of 796. When dividing the Project's net annual GHG emissions, as estimated by the DEIR, by an SP of 796, we find that the Project would emit approximately 3.61 MT $CO_2e$/SP/year (see table below).[33]

| DEIR Greenhouse Gas Emissions | |
|---|---|
| Annual Emissions (MT $CO_2e$/year) | 2,874.50 |
| Service Population | 796 |
| Service Population Efficiency (MT $CO_2e$/SP/year) | 3.61 |
| SCAQMD 2035 Target | **3.0** |
| *Exceeds?* | ***Yes*** |

O2-11 cont'd

As demonstrated above, the Project's service population efficiency value exceeds the SCAQMD 2035 efficiency target of 3.0 MT $CO_2e$/SP/year, indicating a potentially significant impact not previously identified or addressed by the DEIR. As a result, the DEIR's less-than-significant GHG impact conclusion should not be relied upon. A revised EIR should be prepared, including an updated GHG analysis and incorporating additional mitigation measures to reduce the Project's GHG emissions to less-than-significant levels.

### *3) Failure to Demonstrate Consistency with CARB's 2017 and 2022 Scoping Plans*

The DEIR concludes that the Project would be consistent with CARB's 2017 Climate Change Scoping Plan (p. 5.9-17). However, this is incorrect, as the DEIR fails to consider the following performance-based measures proposed by CARB.

O2-12

#### *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 Communities Strategies.[34] CARB has identified the population and daily VMT from passenger autos and

[31] "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf, p. 2.
[32] "CEQA & Climate Change." California Air Pollution Control Officers Association (CAPCOA), January 2008, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA-White-Paper.pdf, p. 71-72.
[33] Calculated: (2,874.50 MT $CO_2e$/year) / (796 service population) = (3.61 MT $CO_2e$/SP/year).
[34] "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.

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."[35] 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), 2026 (Project operational year), and 2030 (target years under SB 32) (see table below).

**2017 Scoping Plan Daily VMT Per Capita**

| | Orange County | | | State | | |
|---|---|---|---|---|---|---|
| Year | Population | LDV VMT Baseline | VMT Per Capita | Population | LDV VMT Baseline | VMT Per Capita |
| **2010** | 3,014,677 | 73,439,010.51 | 24.36 | 37,335,085 | 836,463,980.46 | 22.40 |
| **2026** | 3,368,151 | 77,556,376.65 | 23.03 | 42,655,695 | 935,625,476.00 | 21.93 |
| **2030** | 3,433,510 | 76,760,734.64 | 22.36 | 43,939,250 | 957,178,153.19 | 21.78 |

O2-12 cont'd

As the DEIR fails to evaluate the Project's consistency with the CARB 2017 *Scoping Plan* performance-based daily VMT per capita projections, the DEIR's claim that the proposed Project would not conflict with the CARB 2017 *Scoping Plan* is unsupported. A revised EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

***ii. Project Attributes for Residential and Mixed-Use Projects***

As previously discussed, the DEIR concludes that the Project would be consistent with CARB's 2017 Scoping Plan (p. 5.9-17). However, the DEIR fails to discuss CARB's Updated 2022 Scoping Plan whatsoever, which was released in November 2022. Regarding residential and mixed-use projects, CARB's 2022 *Scoping Plan* states:

> "[T]he first approach the State recommends for determining whether a proposed residential or mixed-use residential development would align with the State's climate goals is to examine whether the project includes key project attributes that reduce operational GHG emissions while simultaneously advancing fair housing."[36]

O2-13

Specifically, among the project attributes identified by CARB to reduce GHG emissions, the DEIR fails to implement or consider the following:[37]

[35] "Supporting Calculations for 2017 Scoping Plan-Identified VMT Reductions," California Air Resources Board (CARB), January 2019, *available at*: https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-and-relationship-state-climate; *see also:* https://ww2.arb.ca.gov/sites/default/files/2019-01/sp_mss_vmt_calculations_jan19_0.xlsx.

[36] "Appendix D Local Actions," California Air Resources Board (CARB), November 2022 , *available at*: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf, p. 21.

[37] "Appendix D Local Actions," California Air Resources Board (CARB), November 2022 , *available at*: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf, p. 22, 23.

| Table 3 – Key Residential and Mixed-Use Project Attributes that Reduce GHGs | |
|---|---|
| **Priority Areas** | **Key Project Attribute** |
| **Transportation Electrification** | • Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval. |
| **VMT Reduction** | • Does not result in the loss or conversion of natural and working lands.<br>• Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or<br>Is in proximity to existing transit stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region's SCS.<br>• Reduces parking requirements by: Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or<br>Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or<br>For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.<br>• At least 20 percent of units included are affordable to lower-income residents. |
| **Building Decarbonization** | • Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking. |

O2-13 cont'd

These features are intended to identify development projects that are clearly consistent with the State of California's greenhouse gas emission targets. We recommend that a revised EIR be prepared which incorporates the above-mentioned measures into Project design, or provides further information and analysis demonstrating that the measures would not be applicable to the Project.

### *4) Failure to Consider Performance-based Standards under SCAG's RTP/SCS*

As previously discussed, the DEIR concludes that the Project would be consistent with SCAG's *RTP/SCS* (p. 5.9-17). 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.

O2-14

### *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"), in which the 2020 RTP/SCS PEIR updates the per capita emissions to 18.8 lbs/day in 2035 (see excerpt below).[38]

**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/b/ | 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%/c/ |

*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*

O2-14 cont'd

As the DEIR fails to evaluate the Project's consistency with the SCAG's per capita emissions, the DEIR's claim that the proposed Project would be consistent with SCAG's *RTP/SCS* is unsupported. A revised EIR should be prepared for the proposed Project to provide additional information and analysis to conclude less-than-significant GHG impacts.

### *ii. 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.[39] Daily VMT per capita in Orange County should decrease from 24.1 to 22.3 VMT during that same period.[40] Here, however, the DEIR fails to consider any of the above-mentioned performance-based VMT targets. As the DEIR fails to evaluate the Project's consistency with the SCAG's performance-based daily VMT per capita projections, the DEIR's claim that the proposed Project would not conflict with SCAG's *RTP/SCS* is unsupported. A revised EIR should be prepared to provide additional analysis to adequately support the less-than-significant GHG impact conclusion.

O2-15

[38] "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.
[39] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.
[40] "Connect SoCal." SCAG, September 2020, *available at*: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176, pp. 138.

# Mitigation

## 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. As such, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the proposed Project.

While the DEIR does consider Project consistency with SCAG's 2020 *RTP/SCS*, the DEIR fails to implement all feasible mitigation measures. Therefore, to reduce the Project's emissions, and to be consistent with California Public Resources Code Section 2115.2(b), we recommend consideration of all of measures listed in the *RTP/SCS* PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") and Greenhouse Gas Project Level Mitigation Measures ("PMM-GHG-1"), as described below: [41]

| **SCAG RTP/SCS 2020-2045** |
|---|
| **Air Quality Project Level Mitigation Measures – PMM-AQ-1**:<br>In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency: |
| a) Minimize land disturbance. |
| b) Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes. |
| c) Cover trucks when hauling dirt. |
| d) Stabilize the surface of dirt piles if not removed immediately. |
| e) Limit vehicular paths on unpaved surfaces and stabilize any temporary roads. |
| f) Minimize unnecessary vehicular and machinery activities. |
| g) Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. |
| h) Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities. |
| j) Require contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project. Prepare a plan for approval by the applicable air district demonstrating achievement of the applicable percent reduction for a CARB-approved fleet. |
| k) Ensure that all construction equipment is properly tuned and maintained. |
| l) Minimize idling time to 5 minutes—saves fuel and reduces emissions. |

O2-16

[41] "4.0 Mitigation Measures." Connect SoCal Program Environmental Impact Report Addendum #1, September 2020, available at: https://scag.ca.gov/sites/main/files/file-attachments/fpeir_connectsocal_addendum_4_mitigationmeasures.pdf?1606004420, p. 4.0-2 – 4.0-10; 4.0-19 – 4.0-23; See also: "Certified Final Connect SoCal Program Environmental Impact Report." Southern California Association of Governments (SCAG), May 2020, *available at:* https://scag.ca.gov/peir.

m) Provide an operational water truck on-site at all times. Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas. Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.

n) Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators.

o) Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites.

p) As appropriate require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site.

q) Require projects within 500 feet of residences, hospitals, or schools to use Tier 4 equipment for all engines above 50 horsepower (hp) unless the individual project can demonstrate that Tier 4 engines would not be required to mitigate emissions below significance thresholds.

r) Projects located within the South Coast Air Basin should consider applying for South Coast AQMD "SOON" funds which provides funds to applicable fleets for the purchase of commercially available low-emission heavy-duty engines to achieve near-term reduction of NOx emissions from in-use off-road diesel vehicles.

s) Projects located within AB 617 communities should review the applicable Community Emissions Reduction Plan (CERP) for additional mitigation that can be applied to individual projects.

t) Where applicable, projects should provide information about air quality related programs to schools, including the Environmental Justice Community Partnerships (EJCP), Clean Air Ranger Education (CARE), and Why Air Quality Matters programs.

u) Projects should work with local cities and counties to install adequate signage that prohibits truck idling in certain locations (e.g., near schools and sensitive receptors).

z) Develop an ongoing monitoring, inspection, and maintenance program for the MERV filters.

aa) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities.

bb) The following criteria related to diesel emissions shall be implemented on by individual project sponsors as appropriate and feasible:

- Diesel nonroad vehicles on site for more than 10 total days shall have either (1) engines that meet EPA on road emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%
- Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
- Nonroad diesel engines on site shall be Tier 2 or higher.
- Diesel nonroad construction equipment on site for more than 10 total days shall have either (1) engines meeting EPA Tier 4 nonroad emissions standards or (2) emission control technology verified by EPA or CARB for use with nonroad engines to reduce PM emissions by a minimum of 85% for engines for 50 hp and greater and by a minimum of 20% for engines less than 50 hp.
- Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
- Diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend approved by the original engine manufacturer with sulfur content of 15 ppm or less.
- The construction contractor shall maintain a 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.

O2-16 cont'd

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.

- 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.
- The contractor shall maintain a monthly report that, for each on road 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. Quantity of fuel, including sulfur content (percent by weight)

cc) Project should exceed Title-24 Building Envelope Energy Efficiency Standards (California Building Standards Code). The following measures can be used to increase energy efficiency:

- Provide pedestrian network improvements, such as interconnected street network, narrower roadways and shorter block lengths, sidewalks, accessibility to transit and transit shelters, traffic calming measures, parks and public spaces, minimize pedestrian barriers.
- Provide traffic calming measures, such as:
  i. Marked crosswalks
  ii. Count-down signal timers
  iii. Curb extensions iv. Speed tables
  iv. Raised crosswalks
  v. Raised intersections
  vi. Median islands
  vii. Tight corner radii
  viii. Roundabouts or mini-circles
  ix. On-street parking
  x. Chicanes/chokers
- Create urban non-motorized zones
- Provide bike parking in non-residential and multi-unit residential projects
- Dedicate land for bike trails
- Limit parking supply through:
  i. Elimination (or reduction) of minimum parking requirements
  ii. Creation of maximum parking requirements
  iii. Provision of shared parking
- Require residential area parking permit.
- Provide ride-sharing programs
  i. Designate a certain percentage of parking spacing for ride sharing vehicles
  ii. Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles
  iii. Providing a web site or messaging board for coordinating rides
  iv. Permanent transportation management association membership and finding requirement.

O2-16 cont'd

**Greenhouse Gas Project Level Mitigation Measures – PMM-GHG-1**

In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the *State CEQA Guidelines*, a Lead Agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to violating air quality standards. Such measures may include the following or other comparable measures identified by the Lead Agency:

b) Reduce emissions resulting from projects through implementation of project features, project design, or other measures, such as those described in Appendix F of the State CEQA Guidelines.

c) Include off-site measures to mitigate a project's emissions.

d) Measures that consider incorporation of Best Available Control Technology (BACT) during design, construction and operation of projects to minimize GHG emissions, including but not limited to:

i. Use energy and fuel-efficient vehicles and equipment;
ii. Deployment of zero- and/or near zero emission technologies;
iii. Use lighting systems that are energy efficient, such as LED technology;
iv. Use the minimum feasible amount of GHG-emitting construction materials;
v. Use cement blended with the maximum feasible amount of flash or other materials that reduce GHG emissions from cement production;
vi. Incorporate design measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse;
vii. Incorporate design measures to reduce energy consumption and increase use of renewable energy;
viii. Incorporate design measures to reduce water consumption;
ix. Use lighter-colored pavement where feasible;
x. Recycle construction debris to maximum extent feasible;
xi. Plant shade trees in or near construction projects where feasible; and
xii. Solicit bids that include concepts listed above.

e) Measures that encourage transit use, carpooling, bike-share and car-share programs, active transportation, and parking strategies, including, but not limited to the following:

i. Promote transit-active transportation coordinated strategies;
ii. Increase bicycle carrying capacity on transit and rail vehicles;
iii. Improve or increase access to transit;
iv. Increase access to common goods and services, such as groceries, schools, and day care;
v. Incorporate affordable housing into the project;
vi. Incorporate the neighborhood electric vehicle network;
vii. Orient the project toward transit, bicycle and pedestrian facilities;
viii. Improve pedestrian or bicycle networks, or transit service;
ix. Provide traffic calming measures;
x. Provide bicycle parking;
xi. Limit or eliminate park supply;
xii. Unbundle parking costs;
xiii. Provide parking cash-out programs;
xiv. Implement or provide access to commute reduction program;

f) Incorporate bicycle and pedestrian facilities into project designs, maintaining these facilities, and providing amenities incentivizing their use; and planning for and building local bicycle projects that connect with the regional network;

g) Improving transit access to rail and bus routes by incentives for construction and transit facilities within developments, and/or providing dedicated shuttle service to transit stations; and

O2-16 cont'd

| |
|---|
| i) Designate a percentage of parking spaces for ride-sharing vehicles or high-occupancy vehicles, and provide adequate passenger loading and unloading for those vehicles; |
| j) Land use siting and design measures that reduce GHG emissions, including:<br>i. Developing on infill and brownfields sites;<br>ii. Building compact and mixed-use developments near transit;<br>iii. Retaining on-site mature trees and vegetation, and planting new canopy trees;<br>iv. Measures that increase vehicle efficiency, encourage use of zero and low emissions vehicles, or reduce the carbon content of fuels, including constructing or encouraging construction of electric vehicle charging stations or neighborhood electric vehicle networks, or charging for electric bicycles; and<br>v. Measures to reduce GHG emissions from solid waste management through encouraging solid waste recycling and reuse. |
| k) Consult the SCAG Environmental Justice Toolbox for potential measures to address impacts to low-income and/or minority communities. The measures provided above are also intended to be applied in low income and minority communities as applicable and feasible. |
| o) Implement preferential parking permit program |
| p) Implement school pool and bus programs |

O2-16 cont'd

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.

Furthermore, as it is policy of the State that eligible renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045, we emphasize the applicability of incorporating solar power system into the Project design. Until the feasibility of incorporating on-site renewable energy production is considered, the Project should not be approved.

A revised EIR should be prepared to include all feasible mitigation measures, as well as include updated health risk and GHG analyses to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The revised 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.

O2-17

Sincerely,



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



Paul E. Rosenfeld, Ph.D.

Attachment A: Health Risk Calculations
Attachment B: AERSCREEN Output Files
Attachment C: Matt Hagemann CV
Attachment D: Paul Rosenfeld CV

## Construction

| 2024 | |
|---|---|
| Annual Emissions (tons/year) | 0.1088 |
| Daily Emissions (lbs/day) | 0.596164384 |
| Construction Duration (days) | 366 |
| Total DPM (lbs) | 218.1961644 |
| Total DPM (g) | 98973.78016 |
| Start Date | 1/1/2024 |
| End Date | 1/1/2025 |
| Construction Days | 366 |
| **2025** | |
| Annual Emissions (tons/year) | 0.0754 |
| Daily Emissions (lbs/day) | 0.413150685 |
| Construction Duration (days) | 365 |
| Total DPM (lbs) | 150.8 |
| Total DPM (g) | 68402.88 |
| Start Date | 1/1/2025 |
| End Date | 1/1/2026 |
| Construction Days | 365 |
| **2026** | |
| Annual Emissions (tons/year) | 0.0221 |
| Daily Emissions (lbs/day) | 0.12109589 |
| Construction Duration (days) | 113 |
| Total DPM (lbs) | 13.68383562 |
| Total DPM (g) | 6206.987836 |
| Start Date | 1/1/2026 |
| End Date | 4/24/2026 |
| Construction Days | 113 |

| Total | |
|---|---|
| Total DPM (lbs) | 382.68 |
| Total DPM (g) | 173583.648 |
| Emission Rate (g/s) | 0.002380415 |
| Release Height (meters) | 3 |
| Total Acreage | 5.51 |
| Max Horizontal (meters) | 211.18 |
| Min Horizontal (meters) | 105.59 |
| Initial Vertical Dimension (meters) | 1.5 |
| Setting | Urban |
| Population | 32,821 |
| Start Date | 1/1/2024 |
| End Date | 4/24/2026 |
| Total Construction Days | 844 |
| Total Years of Construction | 2.31 |
| Total Years of Operation | 27.69 |

## Operation

| Emission Rate | |
|---|---|
| Annual Emissions (tons/year) | 0.0487 |
| Daily Emissions (lbs/day) | 0.266849315 |
| Total DPM (lbs) | 97.4 |
| Emission Rate (g/s) | 0.001400959 |
| Release Height (meters) | 3 |
| Total Acreage | 5.51 |
| Max Horizontal (meters) | 211.18 |
| Min Horizontal (meters) | 105.59 |
| Initial Vertical Dimension (meters) | 1.5 |
| Setting | Urban |
| Population | 32,821 |

AERSCREEN 21112 / AERMOD 21112 02/28/23
14:00:27

TITLE: Victoria Boulevard Apartment, Construction

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**********  AREA PARAMETERS  **********

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| | | | | |
|---|---|---|---|---|
| SOURCE EMISSION RATE: | 0.238E-02 | g/s | 0.189E-01 | lb/hr |
| AREA EMISSION RATE: | 0.107E-06 | g/(s-m2) | 0.847E-06 | lb/(hr-m2) |
| AREA HEIGHT: | 3.00 | meters | 9.84 | feet |
| AREA SOURCE LONG SIDE: | 211.18 | meters | 692.85 | feet |
| AREA SOURCE SHORT SIDE: | 105.59 | meters | 346.42 | feet |
| INITIAL VERTICAL DIMENSION: | 1.50 | meters | 4.92 | feet |
| RURAL OR URBAN: | URBAN | | | |
| POPULATION: | 32821 | | | |
| INITIAL PROBE DISTANCE = | 5000. | meters | 16404. | feet |

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**********  BUILDING DOWNWASH PARAMETERS  **********

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BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

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**********  FLOW SECTOR ANALYSIS  **********

25 meter receptor spacing: 1. meters - 5000. meters

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MAXIMUM IMPACT RECEPTOR

| Zo SECTOR | SURFACE ROUGHNESS | 1-HR CONC (ug/m3) | RADIAL (deg) | DIST (m) | TEMPORAL PERIOD |
|---|---|---|---|---|---|
| 1* | 1.000 | 3.870 | 5 | 100.0 | WIN |

* = worst case diagonal

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********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

| YR | MO | DY | JDY | HR |
|---|---|---|---|---|
| 10 | 01 | 10 | 10 | 01 |

| H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O LEN | Z0 | BOWEN | ALBEDO | REF WS |
|---|---|---|---|---|---|---|---|---|---|---|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 |

| HT | REF TA | HT |
|---|---|---|
| 10.0 | 310.0 | 2.0 |

********** AERSCREEN AUTOMATED DISTANCES **********
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

| DIST (m) | MAXIMUM 1-HR CONC (ug/m3) | DIST (m) | MAXIMUM 1-HR CONC (ug/m3) |
|---|---|---|---|
| 1.00 | 2.941 | 2525.00 | 0.5935E-01 |

| | | | |
|---|---|---|---|
| 25.00 | 3.227 | 2550.00 | 0.5856E-01 |
| 50.00 | 3.475 | 2575.00 | 0.5778E-01 |
| 75.00 | 3.685 | 2600.00 | 0.5702E-01 |
| 100.00 | 3.870 | 2625.00 | 0.5628E-01 |
| 125.00 | 3.391 | 2650.00 | 0.5555E-01 |
| 150.00 | 2.403 | 2675.00 | 0.5484E-01 |
| 175.00 | 1.952 | 2700.00 | 0.5415E-01 |
| 200.00 | 1.663 | 2725.00 | 0.5347E-01 |
| 225.00 | 1.441 | 2750.00 | 0.5281E-01 |
| 250.00 | 1.264 | 2775.00 | 0.5216E-01 |
| 275.00 | 1.122 | 2800.00 | 0.5152E-01 |
| 300.00 | 1.005 | 2825.00 | 0.5090E-01 |
| 325.00 | 0.9076 | 2850.00 | 0.5029E-01 |
| 350.00 | 0.8255 | 2875.00 | 0.4969E-01 |
| 375.00 | 0.7547 | 2900.00 | 0.4911E-01 |
| 400.00 | 0.6946 | 2925.00 | 0.4853E-01 |
| 425.00 | 0.6418 | 2950.00 | 0.4797E-01 |
| 450.00 | 0.5956 | 2975.00 | 0.4742E-01 |
| 475.00 | 0.5549 | 3000.00 | 0.4688E-01 |
| 500.00 | 0.5186 | 3025.00 | 0.4635E-01 |
| 525.00 | 0.4866 | 3050.00 | 0.4583E-01 |
| 550.00 | 0.4579 | 3074.99 | 0.4532E-01 |
| 575.00 | 0.4315 | 3100.00 | 0.4482E-01 |
| 600.00 | 0.4078 | 3125.00 | 0.4433E-01 |
| 625.00 | 0.3863 | 3150.00 | 0.4385E-01 |
| 650.00 | 0.3669 | 3174.99 | 0.4338E-01 |
| 675.00 | 0.3490 | 3200.00 | 0.4292E-01 |
| 700.00 | 0.3325 | 3225.00 | 0.4246E-01 |
| 725.00 | 0.3173 | 3250.00 | 0.4202E-01 |
| 750.00 | 0.3032 | 3275.00 | 0.4158E-01 |
| 775.00 | 0.2902 | 3300.00 | 0.4115E-01 |
| 800.00 | 0.2781 | 3325.00 | 0.4072E-01 |
| 825.00 | 0.2670 | 3350.00 | 0.4031E-01 |
| 850.00 | 0.2566 | 3375.00 | 0.3990E-01 |
| 875.00 | 0.2467 | 3400.00 | 0.3950E-01 |
| 900.00 | 0.2376 | 3425.00 | 0.3911E-01 |
| 925.00 | 0.2290 | 3450.00 | 0.3872E-01 |
| 950.00 | 0.2210 | 3475.00 | 0.3834E-01 |
| 975.00 | 0.2134 | 3500.00 | 0.3796E-01 |
| 1000.00 | 0.2063 | 3525.00 | 0.3760E-01 |
| 1025.00 | 0.1996 | 3550.00 | 0.3723E-01 |
| 1050.00 | 0.1932 | 3575.00 | 0.3688E-01 |
| 1075.00 | 0.1872 | 3600.00 | 0.3653E-01 |
| 1100.00 | 0.1815 | 3625.00 | 0.3618E-01 |
| 1125.00 | 0.1761 | 3650.00 | 0.3585E-01 |
| 1150.00 | 0.1710 | 3675.00 | 0.3551E-01 |
| 1175.00 | 0.1661 | 3700.00 | 0.3518E-01 |
| 1200.00 | 0.1614 | 3725.00 | 0.3486E-01 |
| 1225.00 | 0.1569 | 3750.00 | 0.3454E-01 |
| 1250.00 | 0.1527 | 3775.00 | 0.3423E-01 |

| | | | |
|---|---|---|---|
| 1275.00 | 0.1487 | 3800.00 | 0.3392E-01 |
| 1300.00 | 0.1448 | 3825.00 | 0.3362E-01 |
| 1325.00 | 0.1411 | 3850.00 | 0.3332E-01 |
| 1350.00 | 0.1376 | 3875.00 | 0.3303E-01 |
| 1375.00 | 0.1342 | 3900.00 | 0.3274E-01 |
| 1400.00 | 0.1310 | 3925.00 | 0.3245E-01 |
| 1425.00 | 0.1279 | 3950.00 | 0.3217E-01 |
| 1450.00 | 0.1249 | 3975.00 | 0.3190E-01 |
| 1475.00 | 0.1221 | 4000.00 | 0.3163E-01 |
| 1500.00 | 0.1194 | 4025.00 | 0.3136E-01 |
| 1525.00 | 0.1167 | 4050.00 | 0.3109E-01 |
| 1550.00 | 0.1142 | 4075.00 | 0.3083E-01 |
| 1575.00 | 0.1118 | 4100.00 | 0.3057E-01 |
| 1600.00 | 0.1094 | 4125.00 | 0.3032E-01 |
| 1625.00 | 0.1071 | 4150.00 | 0.3007E-01 |
| 1650.00 | 0.1049 | 4175.00 | 0.2983E-01 |
| 1675.00 | 0.1028 | 4200.00 | 0.2958E-01 |
| 1700.00 | 0.1008 | 4225.00 | 0.2934E-01 |
| 1725.00 | 0.9880E-01 | 4250.00 | 0.2911E-01 |
| 1750.00 | 0.9688E-01 | 4275.00 | 0.2888E-01 |
| 1775.00 | 0.9503E-01 | 4300.00 | 0.2865E-01 |
| 1800.00 | 0.9324E-01 | 4325.00 | 0.2842E-01 |
| 1825.00 | 0.9151E-01 | 4350.00 | 0.2820E-01 |
| 1850.00 | 0.8983E-01 | 4375.00 | 0.2798E-01 |
| 1875.00 | 0.8820E-01 | 4400.00 | 0.2776E-01 |
| 1900.00 | 0.8663E-01 | 4425.00 | 0.2755E-01 |
| 1924.99 | 0.8511E-01 | 4450.00 | 0.2733E-01 |
| 1950.00 | 0.8363E-01 | 4475.00 | 0.2713E-01 |
| 1975.00 | 0.8309E-01 | 4500.00 | 0.2692E-01 |
| 2000.00 | 0.8167E-01 | 4525.00 | 0.2672E-01 |
| 2025.00 | 0.8029E-01 | 4550.00 | 0.2652E-01 |
| 2050.00 | 0.7896E-01 | 4575.00 | 0.2632E-01 |
| 2075.00 | 0.7766E-01 | 4600.00 | 0.2612E-01 |
| 2100.00 | 0.7639E-01 | 4625.00 | 0.2593E-01 |
| 2125.00 | 0.7516E-01 | 4650.00 | 0.2574E-01 |
| 2150.00 | 0.7397E-01 | 4675.00 | 0.2555E-01 |
| 2175.00 | 0.7281E-01 | 4700.00 | 0.2537E-01 |
| 2200.00 | 0.7168E-01 | 4725.00 | 0.2518E-01 |
| 2225.00 | 0.7058E-01 | 4750.00 | 0.2500E-01 |
| 2250.00 | 0.6950E-01 | 4775.00 | 0.2482E-01 |
| 2275.00 | 0.6846E-01 | 4800.00 | 0.2465E-01 |
| 2300.00 | 0.6744E-01 | 4825.00 | 0.2447E-01 |
| 2325.00 | 0.6645E-01 | 4850.00 | 0.2430E-01 |
| 2350.00 | 0.6549E-01 | 4875.00 | 0.2413E-01 |
| 2375.00 | 0.6454E-01 | 4900.00 | 0.2396E-01 |
| 2400.00 | 0.6363E-01 | 4925.00 | 0.2379E-01 |
| 2425.00 | 0.6273E-01 | 4950.00 | 0.2363E-01 |
| 2450.00 | 0.6185E-01 | 4975.00 | 0.2347E-01 |
| 2475.00 | 0.6100E-01 | 5000.00 | 0.2331E-01 |
| 2500.00 | 0.6017E-01 | | |

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********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

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3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

| CALCULATION PROCEDURE | MAXIMUM 1-HOUR CONC (ug/m3) | SCALED 3-HOUR CONC (ug/m3) | SCALED 8-HOUR CONC (ug/m3) | SCALED 24-HOUR CONC (ug/m3) | SCALED ANNUAL CONC (ug/m3) |
|---|---|---|---|---|---|
| FLAT TERRAIN | 3.902 | 3.902 | 3.902 | 3.902 | N/A |
| DISTANCE FROM SOURCE | 107.00 meters | | | | |
| IMPACT AT THE AMBIENT BOUNDARY | 2.941 | 2.941 | 2.941 | 2.941 | N/A |
| DISTANCE FROM SOURCE | 1.00 meters | | | | |

TITLE: Victoria Boulevard Apartments, Operational

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**********  AREA PARAMETERS  **********

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| | | | | |
|---|---|---|---|---|
| SOURCE EMISSION RATE: | 0.140E-02 | g/s | 0.111E-01 | lb/hr |
| AREA EMISSION RATE: | 0.628E-07 | g/(s-m2) | 0.499E-06 | lb/(hr-m2) |
| AREA HEIGHT: | 3.00 | meters | 9.84 | feet |
| AREA SOURCE LONG SIDE: | 211.18 | meters | 692.85 | feet |
| AREA SOURCE SHORT SIDE: | 105.59 | meters | 346.42 | feet |
| INITIAL VERTICAL DIMENSION: | 1.50 | meters | 4.92 | feet |
| RURAL OR URBAN: | URBAN | | | |
| POPULATION: | 32821 | | | |
| INITIAL PROBE DISTANCE = | 5000. | meters | 16404. | feet |

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**********  BUILDING DOWNWASH PARAMETERS  **********

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BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

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**********  FLOW SECTOR ANALYSIS  **********

25 meter receptor spacing: 1. meters - 5000. meters

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MAXIMUM IMPACT RECEPTOR

| Zo SECTOR | SURFACE ROUGHNESS | 1-HR CONC (ug/m3) | RADIAL (deg) | DIST (m) | TEMPORAL PERIOD |
|---|---|---|---|---|---|
| 1* | 1.000 | 2.276 | 5 | 100.0 | WIN |

* = worst case diagonal

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********** MAKEMET METEOROLOGY PARAMETERS **********

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
DOMINANT CLIMATE TYPE: Average Moisture
DOMINANT SEASON: Winter

ALBEDO: 0.35
BOWEN RATIO: 1.50
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

| YR | MO | DY | JDY | HR |
|---|---|---|---|---|
| 10 | 01 | 10 | 10 | 01 |

| H0 | U* | W* | DT/DZ | ZICNV | ZIMCH | M-O LEN | Z0 | BOWEN | ALBEDO | REF WS |
|---|---|---|---|---|---|---|---|---|---|---|
| -1.30 | 0.043 | -9.000 | 0.020 | -999. | 21. | 6.0 | 1.000 | 1.50 | 0.35 | 0.50 |

| HT | REF TA | HT |
|---|---|---|
| 10.0 | 310.0 | 2.0 |

********** AERSCREEN AUTOMATED DISTANCES **********
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

| DIST (m) | MAXIMUM 1-HR CONC (ug/m3) | DIST (m) | MAXIMUM 1-HR CONC (ug/m3) |
|---|---|---|---|
| 1.00 | 1.730 | 2525.00 | 0.3492E-01 |

| | | | |
|---|---|---|---|
| 25.00 | 1.899 | 2550.00 | 0.3445E-01 |
| 50.00 | 2.045 | 2575.00 | 0.3399E-01 |
| 75.00 | 2.168 | 2600.00 | 0.3355E-01 |
| 100.00 | 2.276 | 2625.00 | 0.3311E-01 |
| 125.00 | 1.995 | 2650.00 | 0.3268E-01 |
| 150.00 | 1.414 | 2675.00 | 0.3227E-01 |
| 175.00 | 1.148 | 2700.00 | 0.3186E-01 |
| 200.00 | 0.9785 | 2725.00 | 0.3146E-01 |
| 225.00 | 0.8478 | 2750.00 | 0.3107E-01 |
| 250.00 | 0.7437 | 2775.00 | 0.3068E-01 |
| 275.00 | 0.6602 | 2800.00 | 0.3031E-01 |
| 300.00 | 0.5912 | 2825.00 | 0.2994E-01 |
| 325.00 | 0.5339 | 2850.00 | 0.2958E-01 |
| 350.00 | 0.4856 | 2875.00 | 0.2923E-01 |
| 375.00 | 0.4440 | 2900.00 | 0.2889E-01 |
| 400.00 | 0.4086 | 2925.00 | 0.2855E-01 |
| 425.00 | 0.3776 | 2950.00 | 0.2822E-01 |
| 450.00 | 0.3504 | 2975.00 | 0.2790E-01 |
| 475.00 | 0.3264 | 3000.00 | 0.2758E-01 |
| 500.00 | 0.3051 | 3025.00 | 0.2727E-01 |
| 525.00 | 0.2862 | 3050.00 | 0.2696E-01 |
| 550.00 | 0.2694 | 3075.00 | 0.2666E-01 |
| 575.00 | 0.2539 | 3100.00 | 0.2637E-01 |
| 600.00 | 0.2399 | 3125.00 | 0.2608E-01 |
| 625.00 | 0.2273 | 3150.00 | 0.2580E-01 |
| 650.00 | 0.2158 | 3174.99 | 0.2552E-01 |
| 675.00 | 0.2053 | 3200.00 | 0.2525E-01 |
| 700.00 | 0.1956 | 3225.00 | 0.2498E-01 |
| 725.00 | 0.1867 | 3250.00 | 0.2472E-01 |
| 750.00 | 0.1784 | 3275.00 | 0.2446E-01 |
| 775.00 | 0.1707 | 3300.00 | 0.2421E-01 |
| 800.00 | 0.1636 | 3325.00 | 0.2396E-01 |
| 825.00 | 0.1571 | 3350.00 | 0.2371E-01 |
| 850.00 | 0.1509 | 3375.00 | 0.2347E-01 |
| 875.00 | 0.1452 | 3400.00 | 0.2324E-01 |
| 900.00 | 0.1398 | 3425.00 | 0.2301E-01 |
| 925.00 | 0.1347 | 3450.00 | 0.2278E-01 |
| 950.00 | 0.1300 | 3475.00 | 0.2255E-01 |
| 975.00 | 0.1255 | 3500.00 | 0.2233E-01 |
| 1000.00 | 0.1214 | 3525.00 | 0.2212E-01 |
| 1025.00 | 0.1174 | 3550.00 | 0.2190E-01 |
| 1050.00 | 0.1137 | 3575.00 | 0.2170E-01 |
| 1075.00 | 0.1101 | 3600.00 | 0.2149E-01 |
| 1100.00 | 0.1068 | 3625.00 | 0.2129E-01 |
| 1125.00 | 0.1036 | 3650.00 | 0.2109E-01 |
| 1150.00 | 0.1006 | 3675.00 | 0.2089E-01 |
| 1175.00 | 0.9769E-01 | 3700.00 | 0.2070E-01 |
| 1200.00 | 0.9494E-01 | 3725.00 | 0.2051E-01 |
| 1225.00 | 0.9232E-01 | 3750.00 | 0.2032E-01 |
| 1250.00 | 0.8983E-01 | 3775.00 | 0.2014E-01 |

| | | | |
|---|---|---|---|
| 1275.00 | 0.8746E-01 | 3800.00 | 0.1996E-01 |
| 1300.00 | 0.8520E-01 | 3825.00 | 0.1978E-01 |
| 1325.00 | 0.8303E-01 | 3850.00 | 0.1960E-01 |
| 1350.00 | 0.8095E-01 | 3875.00 | 0.1943E-01 |
| 1375.00 | 0.7897E-01 | 3900.00 | 0.1926E-01 |
| 1400.00 | 0.7707E-01 | 3925.00 | 0.1909E-01 |
| 1425.00 | 0.7525E-01 | 3950.00 | 0.1893E-01 |
| 1450.00 | 0.7350E-01 | 3975.00 | 0.1877E-01 |
| 1475.00 | 0.7183E-01 | 4000.00 | 0.1860E-01 |
| 1500.00 | 0.7022E-01 | 4025.00 | 0.1845E-01 |
| 1525.00 | 0.6867E-01 | 4050.00 | 0.1829E-01 |
| 1550.00 | 0.6718E-01 | 4075.00 | 0.1814E-01 |
| 1575.00 | 0.6575E-01 | 4100.00 | 0.1799E-01 |
| 1600.00 | 0.6436E-01 | 4125.00 | 0.1784E-01 |
| 1625.00 | 0.6303E-01 | 4150.00 | 0.1769E-01 |
| 1650.00 | 0.6174E-01 | 4175.00 | 0.1755E-01 |
| 1675.00 | 0.6049E-01 | 4200.00 | 0.1740E-01 |
| 1700.00 | 0.5929E-01 | 4225.00 | 0.1726E-01 |
| 1725.00 | 0.5812E-01 | 4250.00 | 0.1712E-01 |
| 1750.00 | 0.5700E-01 | 4275.00 | 0.1699E-01 |
| 1775.00 | 0.5591E-01 | 4300.00 | 0.1685E-01 |
| 1800.00 | 0.5485E-01 | 4325.00 | 0.1672E-01 |
| 1825.00 | 0.5383E-01 | 4350.00 | 0.1659E-01 |
| 1850.00 | 0.5285E-01 | 4375.00 | 0.1646E-01 |
| 1875.00 | 0.5189E-01 | 4400.00 | 0.1633E-01 |
| 1900.00 | 0.5097E-01 | 4425.00 | 0.1620E-01 |
| 1924.99 | 0.5007E-01 | 4450.00 | 0.1608E-01 |
| 1950.00 | 0.4920E-01 | 4475.00 | 0.1596E-01 |
| 1975.00 | 0.4888E-01 | 4500.00 | 0.1584E-01 |
| 2000.00 | 0.4805E-01 | 4525.00 | 0.1572E-01 |
| 2025.00 | 0.4724E-01 | 4550.00 | 0.1560E-01 |
| 2050.00 | 0.4645E-01 | 4575.00 | 0.1548E-01 |
| 2075.00 | 0.4568E-01 | 4600.00 | 0.1537E-01 |
| 2100.00 | 0.4494E-01 | 4625.00 | 0.1525E-01 |
| 2125.00 | 0.4422E-01 | 4650.00 | 0.1514E-01 |
| 2150.00 | 0.4352E-01 | 4675.00 | 0.1503E-01 |
| 2175.00 | 0.4283E-01 | 4700.00 | 0.1492E-01 |
| 2200.00 | 0.4217E-01 | 4725.00 | 0.1481E-01 |
| 2225.00 | 0.4152E-01 | 4750.00 | 0.1471E-01 |
| 2250.00 | 0.4089E-01 | 4775.00 | 0.1460E-01 |
| 2275.00 | 0.4028E-01 | 4800.00 | 0.1450E-01 |
| 2300.00 | 0.3968E-01 | 4825.00 | 0.1440E-01 |
| 2325.00 | 0.3909E-01 | 4850.00 | 0.1429E-01 |
| 2350.00 | 0.3853E-01 | 4875.00 | 0.1419E-01 |
| 2375.00 | 0.3797E-01 | 4900.00 | 0.1410E-01 |
| 2400.00 | 0.3743E-01 | 4925.00 | 0.1400E-01 |
| 2425.00 | 0.3690E-01 | 4950.00 | 0.1390E-01 |
| 2450.00 | 0.3639E-01 | 4975.00 | 0.1381E-01 |
| 2475.00 | 0.3589E-01 | 5000.00 | 0.1371E-01 |
| 2500.00 | 0.3540E-01 | | |

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********** AERSCREEN MAXIMUM IMPACT SUMMARY **********

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3-hour, 8-hour, and 24-hour scaled
concentrations are equal to the 1-hour concentration as referenced in
SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY
IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
under Screening Guidance

| CALCULATION PROCEDURE | MAXIMUM 1-HOUR CONC (ug/m3) | SCALED 3-HOUR CONC (ug/m3) | SCALED 8-HOUR CONC (ug/m3) | SCALED 24-HOUR CONC (ug/m3) | SCALED ANNUAL CONC (ug/m3) |
|---|---|---|---|---|---|
| FLAT TERRAIN | 2.295 | 2.295 | 2.295 | 2.295 | N/A |
| DISTANCE FROM SOURCE | 107.00 meters | | | | |
| IMPACT AT THE AMBIENT BOUNDARY | 1.730 | 1.730 | 1.730 | 1.730 | N/A |
| DISTANCE FROM SOURCE | 1.00 meters | | | | |

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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(949) 887-9013
mhagemann@swape.com

## 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);

- 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 100 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.

- 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

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

**Policy:**

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

**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).

**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.

**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.

**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 examinations, 2009-2011.

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Office: (310) 452-5555
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**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. Focus on wastewater treatment.

## Professional Experience

Dr. Rosenfeld has over 25 years of 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 oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. 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 also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

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, creosote, 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 sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

## 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:

**Rosenfeld P. E.,** Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

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

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Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

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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.

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.

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**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.

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**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.

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**., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

**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.

**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.

**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 Conferenc*e. 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.

**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

## Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

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 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. 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. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs 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., Plaintifs 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 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
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 No. 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. 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 Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 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 No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. 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 No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeanette Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

## O2. RESPONSES TO COMMENTS FROM SOUTHWEST MOUNTAIN STATES REGIONAL COUNCIL OF CARPENTERS, JASON A. COHEN, ESQ, MARCH 6, 2023.

O2-1 Comment Letter O-2 is identical to Comment Letter O-1 with the exception of an appended 'Exhibit D' to Comment Letter O-2. Refer to responses to Comments O1-1 through O1-23.

O2-2 The additional exhibit appended to this comment letter is a letter prepared by SWAPE titled, 'SWAPE Comments on Victoria Boulevard Apartments Project' and dated March 3, 2022. The exhibit is lined with Comments O2-3 through O2-17; refer to responses below regarding specific comments raised in the exhibit.

O2-3 The commenter concludes that the Draft EIR fails to adequately evaluate the project's air quality, health risk, and greenhouse gas impacts. Refer to Responses to Comments O2-4 through O2-16 for specific responses.

O2-4 The commenter states that the air quality analysis incorrectly includes reductions to the default architectural and area coating emission factors. The commenter references the February 2016 South Coast Air Quality Management District (SCAQMD) Rule 1113 Advisory Notice. However, the SCAQMD Rule 1113 VOC limits were revised, and those revisions became effective in January 2020. SCAQMD Rule 1113 primarily requires 50 g/L VOC limits for coating applications applicable to the proposed project, including flat coatings, non-flat coatings, and building envelope coatings.[1] Coatings with more than 50 g/L VOC limits are specialty coatings and would not be used by the proposed project.

O2-5 The commenter states that the CalEEMod modeling incorrectly includes several changes to the default construction phase lengths. The air quality questionnaire was filled out by the Applicant to provide information about the project construction, which was incorporated in Draft EIR Section 3.0, *Project Description*. The CalEEMod defaults are generated based on land use. The model was modified based on the information provided by the Applicant in the air quality questionnaire, which is also consistent with the project description; refer to Attachment 2, *AQ Questionnaire*. The commenter acknowledges the appropriateness of this approach in stating "[i]f more specific project information is known, the user can change the default values and input project specific values…" so long as the changes are supported by substantial evidence. Here, the Applicant, based on their experience in developing similar projects, provided adjusted timelines for the construction phases in the air quality questionnaire to the consultant. Therefore, the construction phasing is supported by substantial evidence.

O2-6 The commenter states that the CalEEMod modeling incorrectly includes several changes to the default construction equipment unit amounts and equipment types. The air quality questionnaire was completed by the Applicant to provide information about the project construction; refer to Attachment 2. The modified equipment unit amounts and equipment types were modeled in CalEEMod based on the air quality questionnaire. Here,

[1] South Coast Air Quality Management District, *Rule 1113 Table of Standards*, http://www.aqmd.gov/home/rules-compliance/compliance/vocs/architectural-coatings/tos, accessed March 15, 2023.

the Applicant, based on their experience in developing similar projects, provided adjusted equipment unit amounts and equipment types. Therefore, the construction equipment unit amounts and equipment types are supported by substantial evidence.

O2-7 The commenter states that the evaluation of the project's potential health risk impacts and the resulting less-than-significant impact conclusion is incorrect, and the commenter's updated analysis indicates significant health risk impact. The commenter states that the project should prepare a construction Health Risk Assessment (HRA). The primary purpose of an HRA is to determine long-term health risks, such as cancer risks over, for example, a 30-year residency or 70-year lifetime. As discussed in Draft EIR Section 5.8, *Air Quality* (page 5.8-14 through 5.8-17), construction of emissions from the project are short-term in nature (lasting two to three years) and would cease upon completion. Construction emissions and would not last for 30 years. Exposure to construction emissions during the 28 months of construction would not create long-term health effects to adjacent sensitive receptors. Additionally, the City follows SCAQMD guidance for air quality analysis. SCAQMD's HRA procedures recommend evaluating risk from extended exposures measured across several years and not for short-term construction exposures.

In addition, the construction diesel particulate matter (DPM) emissions calculation performed by the commenter is flawed. The commenter incorrectly used the total DPM emissions during construction, which included both on-site and off-site emissions. However, off-site emissions should be excluded because they would not cause localized impacts or health risk impacts on sensitive receptors near the project site. The commenter's flawed methodology caused overestimation of DPM emissions and associated health risks. Furthermore, the commenter used potential health risks on infants to conclude there would be significant impacts, which is inappropriate. Because cancer risk is presented as the likelihood of contracting cancer, only looking at infants does not accurately show the overall likelihood of contracting cancer for the population in the project area.

The commenter also combined construction and operational health risks. This methodology is flawed. First, the commenter used total operational DPM emissions to calculate operational health risks. However, the majority of the project's operational emissions would occur off-site because the project is a residential development and would not cause substantial on-site emissions. Off-site emissions would not cause localized impacts or health risk impacts on sensitive receptors near the project site. Second, the Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual does not require or recommend adding construction and operation cancer risks. Project construction and operation would not occur simultaneously, and sensitive receptors would not be exposed to both construction and operational toxic air contaminants at the same time. Therefore, adding construction and operational cancer risks together causes double-counting and overestimates cancer risks.

O2-8 Refer to response to Comment O2-7.

O2-9 The commenter states the Draft EIR's GHG analysis, as well as the resulting less-than-significant impact conclusion, is incorrect for four reasons: 1) Incorrect and Unsubstantiated Quantitative Analysis of Emissions; 2) Failure to Identify a Potentially

Significant GHG Impact; 3) Failure to Demonstrate Consistency with CARB's Scoping Plan; 4) Failure to Consider Performance-based Standards under SCAG's RTP/SCS. Refer to responses to Comments O2-10 through O2-15 for specific responses.

O2-10 The commenter states the CalEEMod model may underestimate the project's emissions with inconsistent values. As discussed in responses to Comments O2-5 and O2-6, the air quality questionnaire was filled by the Applicant to provide information about the project construction. The model was modified based on the information provided by the Applicant in the AQ questionnaire, which the commenter acknowledges as an appropriate approach. Here, the Applicant, based on their experience in developing similar projects, provided adjusted timelines for the construction phases and construction equipment unit amounts and equipment type. Therefore, the construction phasing and equipment information are supported by substantial evidence, and the model did not underestimate the project's emissions.

O2-11 The commenter claims potentially significant GHG impacts by comparing the project's emission with SCAQMD 2035 efficiency target of 3.0 MT $CO_2e$/SP/year. The methodologies and significance thresholds presented by the commenter are inappropriate. The commenter compared project emissions with SCAQMD's Interim Tier 4 performance threshold and concluded significant impacts. SCAQMD's GHG thresholds are interim and have not been officially adopted. Moreover, even under SCAQMD's interim thresholds, Tiers 1 through 3 thresholds should be considered prior to the Tier 4 threshold. The commenter failed to consider Tiers 1 through 3 thresholds and directly used the Tier 4 threshold.

O2-12 The commenter states the Draft EIR fails to compare project emissions with Passenger & Light Duty VMT per Capita Benchmarks per SB 375 and the 2022 Scoping Plan. The SB 375 goals are statewide goals and do not directly apply to local development projects. Statewide goals include emissions and service population from all sectors, while individual development projects each have a unique nature, and should not be directly compared against the Statewide goals. Neither the SCAQMD nor the City has adopted the SB 375 statewide goals as thresholds for local development projects.

Additionally, the Notice of Preparation (NOP) of the Draft EIR was issued in July 2021, which established the environmental baseline for the analysis of impacts, before the 2022 Scoping Plan was adopted. The proposed project's consistency with applicable plans was thus analyzed based upon the regulatory documents in effect when the environmental baseline was established. As such, the project's consistency was analyzed against the 2017 Scoping Plan in the Draft EIR. Nonetheless, as the 2022 Scoping Plan was adopted on December 15, 2022, the project's consistency with the 2022 Scoping Plan is analyzed in Section 2.0, *Revisions To Information Presented In The Draft EIR*, of this Final EIR. As shown in Table 2-3, *Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors*, the proposed project would be consistent with applicable measures in the 2022 Scoping Plan.

O2-13 Refer to response to Comment O2-12.

O2-14 The commenter compares project emissions with the SB 375 per Capita GHG emissions Goals and SB 375 RTP/SCS Daily VMT per Capita Target. As discussed in response to

Comment O2-12, above, the SB 375 goals are statewide goals and do not directly apply to local development projects. Statewide goals include emissions and service population from all sectors, while individual development projects each has its unique nature, and should not be directly compared against the statewide goals. Neither the SCAQMD nor the City has adopted the SB 375 statewide goals as thresholds for local development projects. Nevertheless, the Draft EIR Table 5.9-2 includes the project's consistency analysis with SCAG's *The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments – Connect SoCal* (2020-2045 RTP/SCS), which was adopted in compliance with SB 375. As the project is consistent with SCAG's 2020-2045 RTP/SCS, it is also consistent with SB 375.

O2-15 As discussed in response to Comment O2-14, SB 375 goals are statewide goals and not applicable to development projects.

O2-16 The commenter states that the Draft EIR fails to implement feasible mitigation measures. The project has applied all the feasible design features to minimize the air quality and GHG impacts. The project would not cause significant air quality or GHG impacts, and therefore mitigation measures are not required. In addition, the mitigation measures included in the Connect SoCal Program EIR are recommended but not mandatory. Nevertheless, the project would implement, in part, measures referenced by the commenter as required by regulations and rules and as project design features. PMM-AQ-1 a) through g) and m) are included in SCAQMD rules and the project would be required to comply with. PMM-AQ-1 l) is consistent with California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485 requiring reducing the time of idling to no more than five minutes, which the project is required to comply with. In addition, as discussed in Draft EIR Section 5.9, *Greenhouse Gas Emissions*, the project would be required to comply with the latest Title 24 standards and CALGreen Code, and implement project design features to reduce GHG emissions, including electric vehicle (EV) charging stations, bike parking and storage, solar panels, and low-flow water fixtures, which are consistent with PMM-GHG-1 d) through f) and j). It is acknowledged that per Draft EIR Impact Statement GHG-2, the proposed project would be consistent with the GHG emission reduction strategies contained in the 2020-2045 RTP/SCS.

O2-17 The commenter disclaims that the comments were provided based on the limited discovery regarding the project, which may be revised or amended when additional information becomes available. This comment does not identify a specific environmental issue or information addressed or contained in the Draft EIR. Therefore, no further response is necessary.

# Attachment 2: AQ Questionnaire

# DATA, EQUIPMENT AND TIME ESTIMATE – General Information

**Project:** Victoria Blvd. Apts.

| **LAND USE TYPE** | **UNITS/SF** |
|---|---|
| Multifamily | 365 / 331,100 |
| | |
| | |
| | |
| | |
| | |

**ZONING** (Will this project require one?)

Zone Change?

Yes ☒

No ☐

GPA?

Yes ☒

No ☐

| **START DATES – One-Phase** | (Month/ Year) | Duration (Months) |
|---|---|---|
| Demolition (if applicable): | 1/2023 | 1.5 |
| Grading: | 2/2023 | 2.0 |
| Paving: | 6/2024 | 1.5 |
| Construction: | 4/2023 | 28.0 |
| Painting: | 10/2024 | 3.0 |

**Pile Driving**

Is pile driving required?

Yes ☐

No ☒

Number of piles:

Duration (days):

Type of pile driving (e.g., diesel hammer, hydraulic hammer, hydraulic press-in, vibratory, etc.):

| **START DATES – Multi-Phase** | | (Month/ Year) | Duration (Months) |
|---|---|---|---|
| Phase 1 | Demolition: | | |
| | Grading: | | |
| | Paving: | | |
| | Construction: | | |
| | Painting: | | |
| Phase 2 | Demolition: | | |
| | Grading: | | |
| | Paving: | | |
| | Construction: | | |
| | Painting: | | |
| Phase 3 | Demolition: | | |
| | Grading: | | |
| | Paving: | | |
| | Construction: | | |
| | Painting: | | |

**COMPLETION DATE** (Month/ Year)

**For ALL Construction:** 7/2025

# DEMOLITION DETAILS

**Project:** Victoria Blvd Apartments

**DEMOLITION**

| Units | Type of Equipment |
|---|---|
| | Bore/Drill Rigs |
| | Concrete/Industrial Saws |
| | Crane |
| | Crawler Tractors |
| | Crushing/Processing Equip. |
| | Excavators |
| | Graders |
| | Off-Highway Tractors |
| | Off-Highway Trucks |
| | Other Equipment |
| 1 | Pavers |
| | Paving Equipment |
| | Rollers |
| | Rough Terrain Forklifts |
| 2 | Rubber Tired Dozers |
| 1 | Rubber Tired Loaders |
| 1 | Scrapers |
| | Signal Boards |
| | Skid Steer Loaders |
| | Surfacing Equipment |
| | Tractors/Loaders/Backhoes |
| | Trenchers |

**BUILDING DEMOLITION**

Structure Dimensions or Tons of Demolished Material

| Width | Length | Height | | |
|---|---|---|---|---|
| 60 | 150 | 12 | | |

**Haul Truck Data:**

| | | |
|---|---|---|
| Number of Trips/Day: | 20 | |
| Round Trip to Disposal Site: | 40 | (miles) |
| Approx. Cubic Yards of Each Truck | 10 | |

**Asbestos Containing Material:**

| | (Check One) | |
|---|---|---|
| Known to be Present? | ☐ | Yes |
| Unknown | ☒ | No |

**Underground Storage Tanks (UST):**

| | (Check One) | |
|---|---|---|
| Known to be Present? | ☒ | Yes |
| | ☐ | No |

CUSD is responsible for removing UST's prior to start of construction

RELATED ADDITIONAL INFORMATION:

# GRADING EQUIPMENT / DUST CONTROL DETAILS

**Project:** Victoria Blvd Apartments

## GRADING

| Units | Type of Equipment |
|---|---|
| | Bore/Drill Rigs |
| | Concrete/Industrial Saws |
| | Crane |
| | Crawler Tractors |
| | Crushing/Processing Equip. |
| | Excavators |
| 1 | Graders |
| | Off-Highway Tractors |
| | Off-Highway Trucks |
| | Other Equipment |
| | Pavers |
| | Paving Equipment |
| | Pile Drivers |
| 1 | Rollers |
| | Rough Terrain Forklifts |
| | Rubber Tired Dozers |
| 2 | Rubber Tired Loaders |
| 3 | Scrapers |
| | Signal Boards |
| | Skid Steer Loaders |
| | Surfacing Equipment |
| | Tractors/Loaders/Backhoes |
| | Trenchers |

## DUST CONTROL

| Will Haul Roads be paved? | | (Check One) | |
|---|---|---|---|
| | Yes | ☒ | |
| | No | ☐ | |
| **How will dust be controlled?** | | **(Check One)** | |
| | Water? | ☒ | (Recommended) |
| | Chemical? | ☐ | |
| | Other? | ☐ | Specify: |
| **How often will the control method be applied?** | | **(Check One)** | |
| | > 3 Times / Day | ☒ | (Recommended) |
| | > 1 Time / Day | ☐ | |
| | Other | ☐ | |

## EARTHWORK

| | | |
|---|---|---|
| Total Cut | 12,374 | cubic yards |
| Total Fill | 1,856 | cubic yards |
| Duration | | days |

## SOIL IMPORT / EXPORT INFORMATION

| | | |
|---|---|---|
| Soil to be imported | 0 | cubic yards |
| Soil to be exported | 10,518 | cubic yards |
| Hauling Days | 20 | (# of days soil will be brought in or out) |
| Roundtrip Distance | 60 | (distance from site to haul/dump site and back) |

RELATED ADDITIONAL INFORMATION:

# CONSTRUCTION, PAVING, AND PAINTING EQUIPMENT DETAILS

**Project:** Victoria Blvd Apartments

**CONSTRUCTION**

| Units | Type of Equipment |
|---|---|
| | Bore/Drill Rigs |
| | Concrete/Industrial Saws |
| | Crane |
| | Crawler Tractors |
| | Crushing/Processing Equip. |
| | Excavators |
| 1 | Graders |
| | Off-Highway Tractors |
| | Off-Highway Trucks |
| | Other Equipment |
| | Pavers |
| | Paving Equipment |
| | Pile Drivers |
| 1 | Rollers |
| | Rough Terrain Forklifts |
| | Rubber Tired Dozers |
| 1 | Rubber Tired Loaders |
| 1 | Scrapers |
| | Signal Boards |
| | Skid Steer Loaders |
| | Surfacing Equipment |
| | Tractors/Loaders/Backhoes |
| | Trenchers |

**PAVING**

| Units | Type of Equipment |
|---|---|
| 1 | Graders |
| | Off-Highway Trucks |
| | Other Equipment |
| | Pavers |
| 1 | Paving Equipment |
| | Rollers |
| | Rubber Tired Loaders |
| 1 | Signal Boards |
| | Surfacing Equipment |
| | Tractors/Loaders/Backhoes |

**BUILDING INSULTATION – TITLE 24**

Will structures MEET: YES — Title 24 requirements?

Will structures EXCEED: NO

If they EXCEED Title 24 requirements – by what percentage?

Check: 10% ☐

20% ☐

30% ☐

Other: _____ (Fill in %)

**PAVING AREA (Includes existing street widening/excludes concreted areas)**

Total Acres Paved: 0.25 (estimate)

(Please note that "paving" does NOT include concreted areas.)

Please describe any structures/buildings will be pre-coated or painted (please provide square footages as well):

COMMENT LETTER O-3

LOZEAU DRURY LLP

T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
adam@lozeaudrury.com

*Via Email*

March 2, 2023

Belinda Ann Deines, City Planner
Planning Division
City of Dana Point
33282 Golden Lantern
Dana Point, California 92629
bdeines@danapoint.org

**Re: Comment on the Draft Environmental Impact Report prepared for the Victoria Boulevard Apartments, State Clearinghouse No. 2021070304**

Dear Ms. Deines:

I am writing on behalf of Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Draft Environmental Impact Report ("DEIR") prepared for the Victoria Boulevard Apartments (State Clearinghouse No. 2021070304) including all actions related or referring to the proposed construction of a 365-unit apartment complex with an attached 6-story parking structure located at 26126 Victoria Boulevard in the City of Dana Point ("Project").

After reviewing the DEIR, we conclude that it fails as an informational document and fails to impose all feasible mitigation measures to reduce the Project's significant environmental impacts. SAFER requests that the Planning Division address these shortcomings in a revised draft environmental impact report ("RDEIR") and recirculate the RDEIR prior to considering approvals for the Project. O3-1

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).

Sincerely,

Adam Frankel

## O3. RESPONSES TO COMMENTS FROM SUPPORTERS ALLIANCE FOR ENVIRONMENTAL RESPONSIBILITY, ADAM FRANKEL, MARCH 2, 2023.

O3-1 The commenter is writing on behalf of Supporters Alliance for Environmental Responsibility (SAFER). The commenter states that the Draft EIR fails as an informational document and fails to impose all feasible mitigation measures to reduce the project's significant environmental impacts. As such, the commenter requests that the City address the shortcomings in a revised environmental document and recirculate the document for public review prior to considering project approval.

The commenter generally states that the Draft EIR has shortcomings but does not raise new environmental information or directly challenge specific information provided in the Draft EIR. It is unclear what revisions the commenter is requesting in a revised document. Therefore, no further response is necessary. It should also be noted that as detailed in Draft EIR Section 5.1, *Land Use and Relevant Planning*, through Section 5.13, *Public Services/Recreation and Utilities*, upon compliance with existing regulations and mitigation measures, project implementation would not result in any significant and unavoidable impacts. Therefore, the project's potentially significant environmental impacts would all be reduced to less than significant levels upon compliance with existing laws, regulations, and recommended mitigation measures.

The commenter also states that SAFER reserves the right to provide additional comments during review of the Final EIR and at future public hearings concerning the project. This comment is acknowledged, and no further response is necessary.

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# Comment Letters from Interested Persons

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**From:** Dottie McLane <dottiemclane@cox.net>
**Sent:** Sunday, January 29, 2023 3:44:23 PM
**To:** Holly Martino <HMartino@DanaPoint.org>; Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blv Apartments. - Low income set-aside

Setting up a fair system for low-income people to apply for residence should be a priority. It seems that many housing complexes advertise a low income set aside, but somehow low income people in the area never hear about it. Possibly this information is not fairly distributed to the genera public?

So….can you bring this issue to the table? Thanks. PS I have a poor relative looking for a home.

I1-1

## I1. RESPONSES TO COMMENTS FROM DOTTIE MCLANE, JANUARY 29, 2023.

I1-1 The commenter recommends a system be put in place where members of the community can apply for low-income housing in their area. Refer to MR-1.

From: Mary Booth <boothms@gmail.com>
Sent: Monday, January 30, 2023 12:59 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Blvd.

Planning commission,
I am a long time resident of Capo Beach. I love this community. People are generally very normal and hard working , life loving folk. I realize progress must be made.
BUT… I don't know who you want to attract to this seemingly was over populated and way OVER priced housing!!!
Thank God my expenses haven't reached that exorbitant bill they want to ask for renting a new cracker box!!! The audacity that $3315 for a studio apt. And affordable housing is even said in the same article is totally ridiculous!!!
I am a middle class senior and have many friends of all ages who rent in this area. The rents have increased way too fast as opposed to salaries and wages. Most are relatively small families of one to 4. Even a double income from a local business would be difficult to pay for a tiny studio apt!!!!
I am sad to hear about this and would hope enough people will reject this seemingly insane initiative!!!
We need some sensitivity and helpful planning, not a heartless bunch of money mongers!
Please hear from the people, not just investors hoping to make it rich.

I2-1

Sincerely,
MaryBooth

## I2. RESPONSES TO COMMENTS FROM MARY BOOTH, JANUARY 30, 2023.

I2-1 The commenter raises general concerns regarding increased density and high apartment rental costs in Doheny Village. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Ray Valles <ray.valles@lacity.org>
**Sent:** Monday, January 30, 2023 6:29 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Comment (Victoria Blvd. Apartments)

Good Evening Belinda,

Hope you are doing well.
I've lived in Dana Point for the last 22 Years, and enjoy this community.
In the last 5 years I have noticed a tremendous increase in traffic in our city.
It has been an issue in our Marlborough Neighborhood, just to get out on the main street (Del Obispo), due to the left turn lane traffic backing up beyond the entrance to our neighborhood.
San Juan Cap is building more homes (Lannar at the Farm) as well as a new Ganahl Lumber Complex, in which these will increase traffic drastically, once they are both open. I3-1

Now I cannot imagine adding a additional potential 500 Residents with the approval of Victoria Blvd Apartments.
If so, eventually we are going to get to the lockdown traffic mode (just like the area of Camino Capistrano/Ortega Hwy/Del Obispo) in San Juan Cap at major traffic hours.

Please take into consideration the residents who live in Dana Point.
Big Business (Toll Brothers) is big business with bottom line being money.
There needs to be mixed use in this area, not just added apartments- which will add to the day to day population of the city (gas, food, traffic, water, electric, 911 use, etc.).
I would be in favor of 1/3 (116 apartments with mixed use)- just like the new downtown buildings in Dana Point. I3-2

With a 349 Unit Apartments, that is a potential of 500 Occupants (with the amount of proposed 1, 2, 3 bedrooms and studios), let alone added vehicles.
I oppose this proposal to construct this many apartments within our city.
This is not Los Angeles!!

Thank you for your time.

**Mr. Ray Valles**
**Dana Point Home Owner**

## I3. RESPONSES TO COMMENTS FROM RAY VALLES, JANUARY 30, 2023.

I3-1 The commenter raises general concerns regarding increased traffic congestion along local City streets during peak traffic hours. Refer to MR-2.

I3-2 The commenter recommends reducing the proposed number of apartment units and instead include mixed-use development on-site. The comment raises concerns that the proposed apartments would, "add to the day to day population of the city (gas, food, traffic, water, electric, 911 use, etc.)." It should be noted that project impacts as it relates to population growth, fuel consumption, transportation, utilities and public services are analyzed in Draft EIR Sections 5.12, *Population and Housing* (pages 5.12-1 through 5.12-9), 5.10, *Energy* (pages 5.10-1 through 5.10-13; fuel consumption is addressed on pages 5.10-9 through 5.10-10), 5.7, *Transportation* (pages 5.7-1 through 5.7-21), 5.12, *Public Services/Recreations and Utilities* (water is addressed on pages 5.13-5 through 5.13-8 and 5.13-36 through 5.13-39; emergency services are addressed on pages 5.13-1 through 5.13-2 and 5.13-30 through 5.13-33), and Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*. As further discussed in Final EIR Section 2.0, revisions to the project would reduce the number of proposed dwelling units from 349 to 306.

The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Ashley <arschenkel@gmail.com>
Sent: Tuesday, January 31, 2023 2:22 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria apartments

In regards to the low income housing, where will it be offered? What will the monthly rent costs be for the low income housing provided by this venture? I4-1

As a city resident for many years, it saddens me to see yet another developer come in to pillage our community, raising comparable rent costs in an already unaffordable housing market. $3315 for a studio might work for some but is not feasible for our community. It's slowing turning Capo Beach into laguna beach. These apartments will Serve people who have the luxury of affording a second home, but will not offer reasonable housing for the community. It makes Me so sad to see this and know that the city is choosing to change the composition of city residents to only be people who can afford to pay top dollar for housing. I4-2

Ashley Schenkel

## I4. RESPONSES TO COMMENTS FROM ASHLEY SCHENKEL, JANUARY 31, 2023.

I4-1 The commenter requests information as to where the low-income housing units will be located on-site and the associated monthly rental costs. Refer to MR-1.

I4-2 The commenter is concerned about increasing rental costs in the City. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Jocelyn Brennan <jocelyncamille@mac.com>
Sent: Tuesday, January 31, 2023 2:42 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Apartments

As a hard working, high tax paying Dana point resident I am strongly against the proposed VBA building. We do not need that type of structure destroying our quaint little town. Enough is enough!!!! Stop putting profits over people and community I5-1

Please submit a HARD NO from me.

Thank you
Jocelyn Brennan

## I5. RESPONSES TO COMMENTS FROM JOCELYN BRENNAN, JANUARY 31, 2023

I5-1 The commenter generally opposes the project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Sheila Daniels <sdanielsot@icloud.com>
Sent: Tuesday, January 31, 2023 2:29 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Opposition to Victoria boulevard apartments

Belinda Deines,

My name is Sheila Daniels and I'm a Dana Point resident for the past decade.
I strongly oppose the development of Victoria Boulevard Apartments. Traffic in Dana point has steadily deteriorated in the past decade as more developments have been built. It has also ruined the landscape and natural flora of the area. Also as observed with the past rain the increase in population also brought an awfully disgusting increase in pollution to the run off that goes into our beach! I6-1

We are in strong opposition.

Thank you,
Sheila Daniels

## I6. RESPONSES TO COMMENTS FROM SHEILA DANIELS, JANUARY 31, 2023.

I6-1 The commenter raises concerns regarding increased traffic congestion, impacts to landscape and natural flora, and increased surface water pollution due to increased population as a result of new development in the City.

With regards to traffic congestion, refer to MR-2.

Impacts to biological resources as a result of project implementation are analyzed in Draft EIR Section 8.0, *Effects Found Not to be Significant* (pages 8-3 through 8-5). As discussed therein, based on the *Results of a Biological Resources Assessment for the Doheny Village Zoning District Update Project – City of Dana Point, Orange County, California*, prepared by Michael Baker International and dated July 2, 2020, the project site is completely developed and paved with the existing CUSD bus yard and associated structures with no vegetation on-site, no special status plant or animal species are expected to occur on-site. Therefore, no impacts to special status species would occur.

Water quality-related impacts are analyzed in Draft EIR Section 5.5, *Hydrology and Water Quality* (pages 5.5-1 through 5.5-31) and Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, and the analyses conclude that upon compliance with existing regulations, the project would construct on-site storm drain infrastructure and water quality best management practices (BMPs) in order to filter water prior to discharge. As such, project impacts to water quality would be less than significant.

From: Sara Aplanalp <aplanalp1@yahoo.com>
Sent: Tuesday, January 31, 2023 10:10 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Blvd apts

Good evening Belinda,
I'm writing to you in regards of the proposed apartment development in capo bch.
As u know so many who live here and have lived here for 50+ years cherish the sleepy and historic beach town feel that has been Dana Point. We do not want massive modem apt complexes, upscale expensive eateries in the harbor and luxury condos.
We have chosen to live/work/retire in Dana Point because we do not have an affinity to Newport Beach, Irvine or the like. This new project is a major upset to the existing community. I am not for modernizing Dana point, raising rents, higher taxes, congestion, so I strongly have to say no to this plan. I hope the powers at be hear what we are saying and do not move forward on this .
Regards,
Sara Aplanalp

I7-1

## I7. RESPONSES TO COMMENTS FROM SARA APLANALP, JANUARY 31, 2023.

I7-1 The commenter generally opposes the proposed project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Suz <suz-a@cox.net>
Sent: Wednesday, February 1, 2023 9:27 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Apartments

Hello,
I would like to express my opinions of how ridiculous I think this project would be. Not only is this projected site entirely inappropriate for this particular area, we currently don't have the necessary law enforcement to handle current situations that occur now which includes the homelessness. I8-1

Projects have started and stopped in the harbor that have residents upset and we don't need another massive project to interfere with the lives of the long time residents of Dana Point that have chosen this city because of its quaintness. I8-2

Let's put a stop to this project.

Suzanne Aplanalp

## I8. RESPONSES TO COMMENTS FROM SUZANNE APLANALP, FEBRUARY 1, 2023.

I8-1 The commenter generally opposes the project and states that the proposed development is inappropriate for the particular area. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

The commenter also raises concerns regarding the adequacy of police protection services in the project vicinity. As discussed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-2 and 5.13-32 through 5.13-33), the City contracts the Orange County Sheriff's Department (OCSD) for police services. Project implementation would result in additional demands on existing police protection services; however, compliance with relevant legislations and General Plan policies would ensure the project's additional demand for police protection services do not adversely impact OCSD's ability to meet its established response times and police staffing levels. Further, as analyzed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, revisions to the project would neither result in land use changes nor implement any new policies that could induce substantial unplanned population growth or result in any new potentially adverse impacts related to public services not previously considered and analyzed in the Draft EIR in this regard. The project would conform with General Plan Public Facilities/Growth Management Element Policies 4.1 and 4.5, ensuring desirable level of police protection services is maintained by periodically evaluating services and service criteria and coordinating with other agencies. In conformance with General Plan Public Safety Element Policies 4.4, 4.5, and 7.1, the City would establish and maintain mutual said agreements with surrounding cities for police protection, encourage building code requirements that assure police protection, and adopt Orange County level of service standards for law enforcement. Additionally, as detailed in Specific Plan Section 6.2.1, *Financing Mechanisms*, and in congruence with General Plan Land Use Element Policy 3.1, impact fees and/or exactions would be utilized to offset project demands on existing services, including police protection services. Accordingly, operational impacts concerning police protection services would be less than significant.

I8-2 The commenter notes that projects have started and stopped in the Dana Point Harbor area and opposes development of the project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Susan Hinman <shinman@cox.net>
**Sent:** Friday, February 3, 2023 3:14:57 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blvd. Input

Dear Ms. Deines,

Many of us are looking forward to the presentation by the Toll Brothers at the Dana Point Civic Association Coffee Chat on February 10. As a long-time Dana Point resident it is my hope that this proposed apartment complex will provide a significant improvement in the quality of life of many living in our community.

Here are several concerns that will hopefully be addressed productively as this project moves toward possible approval: I9-1

1. Since it appears that this proposed development intends to define 15% of the apartments to qualify and meet affordable housing needs of those living and working in Dana Point, is there procedure that can provide existing, qualified, working Dana Point residents to have priority in renting those affordable units?
2. How do the proposed plans for 349 units efficiently plan for the safe and efficient storage of trash with a procedure for a trash pickup that prevents unsightly, unhealthy weekly disposal? I9-2
3. What are the landscaping plans to screen the development from major transportation corridors and guarantee sound attenuation for the building occupants? I9-3
4. Hoe does this proposed plan integrate with adequate nearby public recreational facilities? I9-4

Many of us look forward to the presentation of this project and anticipate that the end product will be attractive, well-planned multiple dwelling units that will integrate with the community and improve the quality of life for all of our residents.

Sincerely,

Susan Hinman

## I9. RESPONSES TO COMMENTS FROM SUZANNE HINMAN, FEBRUARY 3, 2023.

I9-1 The commenter questions whether Dana Point residents would have priority in renting the proposed affordable units. Refer to MR-1.

I9-2 The commenter requests information regarding trash enclosures and collection associated with the proposed residential uses on-site. As discussed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (page 5.13-9), solid waste disposal services to the project site would be contracted through CR&R Environmental Services (CR&R). Trash rooms, which would include both trash and recycle bins, are proposed on each floor of the parking garage, and trash collection would occur once per week. Trash collection would occur within the proposed parking structure.

I9-3 The commenter requests information regarding the proposed landscaping plans to screen the development from transportation corridors and provide sound attenuation for building occupants. As discussed in Draft EIR Section 3.13, *Project Description* (page 3-13), Section 4.4.1, *Conceptual Landscape Plan*, of the Specific Plan details the landscape design concept for the project. The purpose of such landscaping is not to screen development or attenuate sound, but rather soften proposed hardscape features, increase impermeable surfaces on-site, and meet the City's regulations pertaining to landscaping.

With regards to providing sound attenuation for future building occupants, effects of the environment on a project are not subject to CEQA review (Public Resources Code Sections 21065 and 21068). CEQA is generally not concerned with the effect the existing environment might have on proposed projects, and such effects are not treated as changes in the physical environment (*California Bldg. Indus. Assn. v. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369, 378 (2015). (CEQA does not require analysis of impact that existing environmental conditions might have on a project, its residents, or its users, except when required by specific statutory exception). Nevertheless, as analyzed in Draft EIR Section 5.11, *Noise* (page 5.11-26), courtyards, rooftops, and other proposed outdoor gathering areas would generate crowd noise of approximately 35 A-weighted decibels (dBA), which is within City exterior noise standard limits (55 dBA for daytime and 50 dBA for nighttime). Overall, operational impacts concerning noise attenuation would be less than significant.

I9-4 The commenter requests information regarding the integration of the proposed project with nearby public recreational facilities. Draft EIR Section 3.4, *Project Characteristics* (pages 3-8 through 3-11), provides a description of both public and private recreational facilities proposed as part of the project that would tie into existing recreational facilities in Doheny Village. Public improvements include a public park with active and passive recreation amenities (Victoria Shore Park) proposed at the southeastern corner of Victoria Boulevard and Sepulveda Avenue, a Dog Park, and two public paseos along the former La Playa Avenue right-of-way. Project-related impacts to parks and recreation are analyzed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-3 through 5.13-4, 5.13-34 through 5.13-35, and 5.13-45) and Final EIR Section 2.0, *Revisions To Information Presented In The Draft EIR*.

**From:** Brad Smith <bradleyjsmithx@yahoo.com>
**Sent:** Saturday, February 4, 2023 4:35:53 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blvd Apartments

Hi Belinda
I like the proposed Victoria Blvd Apartment project. I think it will be nice addition to Doheny Village and help spur a revitalization in the neighborhood.
Best regards
Brad Smith
33885 Robles Dr
Lantern District

I10-1

## I10. RESPONSES TO COMMENTS FROM BRAD SMITH, FEBRUARY 4, 2023.

I10-1 The commenter generally supports the project and states that it would help spur revitalization in the neighborhood. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Larry Dorn <tplproperties@sbcglobal.net>
**Sent:** Sunday, February 5, 2023 8:30:18 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Proposed Victoria Boulevard Apartments

Belinda,

As an owner of some homes adjacent to the property and having been in the multifamily business for over 30 years, my comments are with an understanding of what the reality a project like this will have on the surrounding community. The city has a responsibility to approve developments which will enhance the community and this one as presented does not even come close. I11-1

Best,
Larry Dorn

Larry Dorn
2353 Irvine Avenue
Newport Beach, CA 92660
714-742-4072

February 5, 2023

VIA ELETRONIC MAIL

Belinda Deines
City of Dana Point Planning Division
3328 Golden Lantern
Dana Point, CA 92629

Dear Belinda Deines & Staff,

I write this letter to provide my comments on the proposed Victoria Boulevard Apartments ("Proposed Project"). I am an adjacent property owner. As set forth below, the Proposed Project as proposed is a tremendous safety hazard to the surrounding community and would greatly impinge on the property rights of the surrounding community.

First, I will address the safety issue. As I am sure you are aware, the Victoria Blvd fire station is located directly across the street from the Proposed Project. Unfortunately, the only direction of egress from the station is onto Victoria, and any significant traffic or parking would greatly hamper the fire engine and paramedic vehicle's ability to maneuver to an emergency. Existing traffic in the morning heading in the direction of Doheny Park Road already creates a backup from Sepulveda to Via Santa Rosa. The single main entrance and exit to and from the Proposed Project flows onto Victoria with the majority of traffic heading to/from Doheny Park Road; this is directly in the path of the emergency vehicles. The current ability for emergency services to reach their destination can be delayed significantly at certain times of day due to existing traffic patterns even now. Adding a project this size would likely double the traffic count during commute times and block the ability of emergency vehicles to exit, further delaying response times. In an emergency, every moment counts, and I am at a loss as to how the City could consider purposefully further hampering the fire station's ability to reach residents in need.

In addition to the extreme risks to Dana Point residents by restricting access to emergency services, the Proposed Project would bring significant parking issues for existing residents. Currently, parking during non-business hours is nearly non-existent. Few of the houses in the community have enough parking for their residents right now. Add in the trailer park at the corner of Sepulveda and Victoria, and there is simply not enough available street parking. The developers of the Proposed Project say they will add 14 spots on Victoria by changing the direction to angled parking, but currently there are 12 parallel spaces so this is a net gain of 2. The suggestion that there will be anything but parking mayhem is a sham. The developers have

far underestimated their parking needs and have disregarded the impact to the surrounding residents.

This Proposed Project is not designed nor is the location one which will attract families. The complex is designed for a demographic for the 20-50 year-olds who are likely to have roommates due to the pricing, and that alone will double the estimated car count over what is proposed. So where are these tenants, guests and multiple car owner residents going to park? Where are the 50 additional spots going to come from that the Toll Brothers promised the church on Sundays? They will not fit on the streets as there currently is not enough parking as is, and the streets are already congested at critical times of day.

The developers are proposing what they consider a “high-end” Project, but their plans completely disregard the surrounding community and residents. There is a complex of Section 8 apartments across the street, single family homes, a church with their school, and a large mobile home park. When you add the Proposed Project with approximately 1000+ additional residents and 450+ additional cars, it becomes unsafe and deprives the community of the ability to enjoy their properties. The proposed community park at the corner of Victoria and Sepulveda is ripe to become a mecca for the homeless community and those looking for a gathering spot create more disruption to the community. Add in a proposed firepit and it offers a long term haven for those seeking anonymity.

The current property owners and residents have legal right to the quiet enjoyment of their homes. This community would like to see open space. The only reasonable alternative choices to this Proposed Project would be 1) to keep a land lease in place with Toll Brothers but propose they do a subdivision of single-family homes on the smaller lots like the surrounding community, or 2) authorize an apartment community of less than 150 units. This will reduce the safety concerns, reduce on street parking and have Toll Brothers rethink their community park which will become the community gathering space and the sheriff’s most visited destination.

I appreciate the opportunity to walk you through the community and show you the safety concerns and how the Proposed Project would interfere with the property rights of the current owners and residents. I welcome any feedback or further questions.

Larry Dorn

26091 A, 26091 B, 26099 A, 26099 B, Victoria Blvd

## I11. RESPONSES TO COMMENTS FROM LARRY DORN, FEBRUARY 5, 2023.

I11-1 The commenter generally opposes the project and claims that the proposed development would not enhance the community. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Dan Vincent <danvincent8@gmail.com>
**Sent:** Monday, February 6, 2023 4:39 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Public Comment, Victoria Blvd. Apartments

Attached is a letter I recently sent to Councilmen Villar and Federico (January 21, 2023) regarding my thoughts on the proposed building of the Victoria Blvd Apartments by Toll Brothers. Having read the news story about this project by Breeana Greenberg (Dana Point Times) a few days later (January 26, 2023), I see some of my figures/estimates in the letter may be slightly off. It certainly doesn't mitigate the way I feel about this colossal project. Also, Greenberg's article didn't specifically say who earmarked $40 million (the proceeds of the ground lease) to Dana Hills High School; however, I now assume it is someone/some group from the City of Dana Point or the school district who makes that decision. Is that correct?

Although it does make sense money from school property sold/leased would go to the benefit of our City's schools, I found it disturbing that many who spoke in favor of this development at the November 16th, 2022 Toll Brothers meeting with the public, were speaking in favor of the project based solely on the money going to Dana Hills High School. This bothers me because this "build out" affects the neighborhood of those who live around the project and have some "skin in the game", and more specifically, their quality of life. But the support (at least some of the support) for the project seems to be based solely on the financing of a "pet project" or some peoples connection to the need for money at Dana Hills High School. Like one of the parties speaking said at the Toll Brothers meeting (at least said something similar to), "those in favor of this project, we have nothing to lose". So specifically earmarking the money prior to the approval of this build seems like it may be pitting our neighborhood against those who simply want the money. Could there have been a better way? I don't know, just a thought. I12-1

It also seems ironic that last week I received a "Notice of Availability of a Draft EIR for Victoria Boulevard Apartments" from the City with a big notation on the outside of the form printed next to my name and address saying, "Important Public Notice, This May Affect Your Property". This is confirmation of what I am trying to say. I'm sure only the homes around the Victoria project received this notice. So in the interest of fairness, I hope the opinions of those that received the notice and live in the neighborhood where their property will be affected, will be/should be considered before those that are only interested in the money proceeds. Anyway, thank you for your time and this opportunity for input... I12-2

My letter is reprinted here. I think it's clear I am not in favor of this immense apartment project. And just so you know, I'm not against the sites development, I am fearful of the development under this proposal.

January 21, 2023

Mr. Michael Villar

Dana Point City Councilman

District 5, Capistrano Beach

With the release of FMS Research's newest community survey presented to the City Council on January 17, 2023, I felt it was a good time to take the opportunity to write to you (I should have done this a few months ago). Taking information from an article posted in the Dana Point Times about the survey, I noted that the number one issue raising concern for residents throughout the City is overdevelopment. That article and its issues segue into the topic I have strong feelings about, that being the possible development of a LARGE-SCALE apartment complex in the Doheny Village area of Capistrano Beach, known as the Victoria Boulevard Apartments project. This is the reason I am specifically writing to you, because I understand you represent the residents of Capistrano Beach for the City Council. I12-3

As background, I will say my wife and I throughout our lives living in Orange County coveted the opportunity to one day be stable enough to move to the beach. We knew we didn't want to move to the more touristy cities of Huntington, Newport, or Laguna Beach; however, we were ecstatic to find the peaceful Capistrano Beach community as the place for our new home. Dream achieved.

There are so many different reasons we love the area, but most of them circle around the focal point of Dana Point and Capistrano Beach's quaint, small-town atmosphere, despite some minor "bigger city" problems such as traffic, specifically along Pacific Coast Highway and some of its intersecting streets. Most of the people I talk to would love to keep our small-town feel, without interfering with the normal progression of development for changing times and development for the City. The key however is to move forward with balance, and making as many of our City's residents satisfied as possible with their quality of life. I12-4

I was quite concerned when I first read about the Victoria Boulevard Apartment development last Fall, not because it was in my neighborhood, but because of its enormity in concept. As I read, it is my understanding the Toll Brothers proposal is for the "development of a three to five story, 365-unit apartment complex, with an attached six story (seven level) parking structure and associated amenities…" My question is why and how this is even being considered, (given the nature of the size of the development), being built anywhere in our City. Not only that, how does it fit into the atmosphere of the existing Doheny Village, let alone the feeling of the existing Capistrano Beach community. I12-5

Just like so many other residents, some of my concerns are related to traffic, noise, parking, overuse/overcrowding of our neighborhood and the small parks in our community (and yes, I know the project is proposing a dog park and other amenities for the residents). Because of my concerns, I attended the Victoria Blvd. Apartment public workshop presented by the Toll Brothers on November 16, 2022. *Although late*, I did hear that this development would have some studio apartments, and units up to as large as 3 bedrooms. Based on an average of 4 persons occupying each unit, we are talking about adding approximately 1500 or more people to this small area. Extrapolating the idea that each unit has at least 2 drivers per unit (average), we are talking about a minimum of 700 cars for the property with countless trips into and out of the neighborhood just for this complex. (Probably not the same projections the developer provides.) I know there has been a traffic survey done, but do you really think Victoria and Sepulveda can truly handle an influx like this? Just because the survey says it can accommodate these vehicles, how efficiently can they handle the new traffic? How long will residents have to wait in line to get out of our neighborhood in the morning, simply trying to turn onto Doheny Park Road? Have you seen the traffic in the morning trying to get on the n/b I-5 at Camino Capistrano and Stonehill? I12-6

I know there is a parking structure associated with building the new complex, but really, take a look at most multi-unit developments in the City. Despite spaces such as driveways, garages, or outdoor private property parking stalls, a major number of vehicles for multi-unit complexes spill out and are parked on the City streets surrounding those projects. I ask for this development, has anyone on the City Council other than you or Councilman Federico even driven in our Victoria neighborhood at night to see the existing problem with parking already? It's foolhardy to think behavior for this complex would be any different. And if they posted the area with "No Stopping" zones, the cars would just be parked on adjacent streets further away such as up the hill on Camino Capistrano (Via Canon) or over to the Big Five parking lot. I12-7

When attending the November 16th meeting, there were other concerns created in my mind as I listened to the public. Those include:

- A vast number of residents from the neighborhood who came to the meeting professed they didn't even know about the potential development until just before that November 16th meeting. I wonder how many other residents in the neighborhood still don't know about this proposal. I12-8
- Apparently, Toll Brothers is offering the City 40 (?) million dollars which will go to the school district and Dana Point High School for the development of this property in this way. Smart move by Toll Brothers. I heard at the meeting associated school district personnel and "friends" of the school saying comments similar to, "why wouldn't we do this. The school is getting 40 million dollars for doing nothing." The thing is, they probably don't live in my neighborhood and the project has no real effect on them. These are totally self-serving comments. They have nothing to do with the project and in no way does it effect their way of life. I wonder what they would say if this monstrosity was built next door to their home. Like I said, smart move by Toll Brothers, place neighborhood against neighborhood and BUY support for their project. Can you imagine how much revenue this project is generating for Toll Brothers? I12-9

Anyway, I think you can see and understand the substance of my concerns. Just by my limited contacts, I feel like the residents around the new construction who know about the size of this development are generally opposed to the project. To be clear, many/I am not opposed to development, just the manor it is being proposed at this location relevant to its size. And as suggested from the FMS survey, this does not seem to be the theme of our neighborhood alone (overdevelopment), but the feeling of many of the residents throughout our wonderful City. I12-10

Respectfully,

Dan Vincent

PS: And just in closing, I may be off a little on some of the "numbers" I am proposing here and I apologize if I am wrong on those. It's been a long time since the November 16, 2022 meeting. It doesn't minimize my concerns in any way.

March 1, 2023

Good afternoon Belinda,

I have just a few comments/questions after attending the public meeting this past Monday night (2-27-23) considering the Victoria Boulevard Apartments' EIR:

- The EIR studied three possibilities for the development of the property at this location, including the 349-unit apartment development by Toll Brothers, a "VILLAGE COMMERCIAL/RESIDENTIAL ZONING DISTRICT DEVELOPMENT" creating the addition of a 114-unit multi-family residential development on 4.4 acres of the project site (the remaining 1.1-acre parcel along Sepulveda Avenue would be graded and landscaped with turf, to serve as public open space), and the "NO PROJECT" ALTERNATIVE. Personally, of the three choices, I would like the no project alternative best and the smaller development second. However, my questions are, can there be other considerations for this space AND would it be possible/appropriate to get more neighborhood input from the people that live in the area? I believe there could be other developments possible that would be profitable for the City (School District) and also blend in with the nature and composition of the Capistrano Beach/Doheny Village area. (and the existing zoning) I12-11
- As indicated by one of the Planning Commissioners on Monday night 2/27/23, the current plan for this area certainly can divide the interests of residents within our City. Capo Beach residents want "reasonable" development, and those with interests in the school district tend to see the big money payout (as stated by some people during the Toll Brothers public meeting last November) from some that may have no connection to our neighborhood. I'm sure there is an equitable solution where the City can scale back the proposed development plan and still gain a nice payout for the school district. I12-12
- Regardless of the current traffic survey for the proposed development, I along with others who spoke at the EIR meeting are concerned with issues related to traffic. 349 units, 2 cars per unit (easily could be higher), on average two trips in and out of our neighborhood daily, equals ABOUT 1400 additional car trips daily in and out of our neighborhood. Others with experience in this topic spoke at the meeting concerning large development parking problems, and regardless of the spaces provided in many projects, apartment resident parking will spill out into the adjacent streets----as evidenced in other multi-unit developments in our City. I12-13
- I ask all Planning Commissioners to drive into our neighborhood. Two small, single laned streets going in each direction lead into and out of this proposed mammoth development (Victoria and Domingo Avenue). Take a look at our neighborhood. Come at different times of the day. See the parking issues. Does the proposed development fit in any way? Do you think it is reasonable to add the additional traffic/parking issues to this small area? Fair to the residents? If you lived here, how would you feel about a development/change of this size down or across the street from where you live?
- I find it interesting that Toll Brothers is asking for what appears to be the maximum amount of development for this site. Their interest (as it should be), is profit. Please consider this as we move forward (which I'm sure you do). The interests of those who live in Capo Beach is to protect our quality of life. I12-14
- Lastly, I remind the Commission that on January 17, 2023, FMS Research presented a community survey to the City Council indicating that the **number one** concern for residents throughout the I12-15

City is the overdevelopment of our City. This issue unites the Dana Point “proper” (northwest) residents and the Capo Beach communities. Please hear what we would like for our City… Thank you.

I12-15
cont'd

Dan Vincent

Capistrano Beach

Email: danvincent8@gmail.com

## I12. RESPONSES TO COMMENTS FROM DAN VINCENT, FEBRUARY 6 AND MARCH 1, 2023.

I12-1 The commenter requests information regarding the decision body responsible for allocating $40 million, to be secured by lease revenues from the project, for improvements to Dana Hills High School; refer to MR-3.

I12-2 The commenter raises concern regarding proper noticing of the project. The City disseminated the Notice of Preparation of the Draft EIR and Initial Study in accordance with applicable law in July of 2021, then distributed a Notice of Availability of the Draft EIR, again in accordance with applicable law, in January 2023. In addition, the City has so far noticed and conducted two public workshops through the Planning Commission on November 16, 2022 and February 27, 2023. Additional public hearings on the matter will be conducted before any final action on the project is taken, and the City will continue solicit the questions, concerns, and views of neighbors, residents, and others. The purpose of these public processes – commenting opportunities and public meetings – is to provide current and relevant information on the project status and its impacts, and to solicit public comment on an ongoing basis as the City evaluates and considers the proposed project.

The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project.

I12-3 The commenter raises concerns regarding overdevelopment throughout the City. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I12-4 The commenter raises concerns regarding traffic along Pacific Coast Highway and local roadways and maintaining a small town feel. Refer to MR-2.

I12-5 The commenter requests information as to why and how this project is being considered given the size of the development and the existing look and feel of the area. This comment is acknowledged. Refer to MR-6 regarding building height and massing as well as land use compatibility. Additionally, as discussed in Draft EIR Section 5.2, *Aesthetics/Light and Glare* (page 5.2-15), development of the proposed project would improve the compatibility, character, and visual quality of the project site by demolishing the existing dilapidated CUSD facility and constructing a new residential development. Further, revisions to the

project, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, have been incorporated that reduce the maximum number of building floors, particularly along Victoria Boulevard. Overall, the proposed project would be required to comply with the Development Standards and generally comply with the Specific Plan Design Guidelines contained in the Specific Plan, which would ensure consistent and orderly development of the project site. As the proposed Specific Plan establishes the regulatory framework, including Development Standards and Design Guidelines for a compatible residential development that would meet the intent of the General Plan for aesthetic character/quality, implementation of the Specific Plan would not substantially degrade the visual character and quality of the project site and surrounding area. Impacts would be less than significant in this regard.

I12-6 The commenter raises concerns regarding traffic, parking, noise, recreational facilities, and overuse/overcrowding within the project area as a result of project implementation. This comment is acknowledged. Refer to MR-2 regarding transportation-related impacts and MR-4 regarding on-site parking standards.

- Noise. Noise-related impacts associated with project implementation are analyzed in Draft EIR Section 3.11, *Noise* (pages 5.11-1 through 5.11-31). With adherence to existing federal, State, and local regulations and standards, including interior and exterior noise standards and policies adopted as part of the Noise Element of the General Plan and Municipal Code Section 11.10, *Noise Control*, short-term construction and long-term operational impacts were determined to be less than significant.

- Parks and Recreations. Impacts to parks and recreation as a result of project implementation are analyzed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-3 through 5.13-4, 5.13-34 through 5.13-35, and 5.13-45) and Final EIR Section 2.0. Upon compliance with existing regulations, including Municipal Code Section 7.36.050, *Payment of In-Lieu Fees for Park and Recreation Purposes*, and General Plan Land Use Element Policy 3.1, and Public Facilities/Growth Management Element Policy 5.11, both of which require new development to contribute a fair share cost to support public facilities), impacts were determined to be less than significant.

- Growth. Project impacts as it relates to population growth are analyzed in Draft EIR Sections 5.12, *Population and Housing* (pages 5.12-1 through 5.12-9) and Final EIR Section 2.0. Based on Southern California Association of Governments' (SCAG) growth forecasts, the proposed development potential would increase the City's housing stock by 349 dwelling units and increase the City's population by up to 796 persons as analyzed by the Draft EIR. As shown, the proposed project's buildout would be within SCAG's population and dwelling unit forecasts for 2045. The revised project's dwelling unit total would be reduced by 43 dwelling units and as such would not result in any new potentially adverse growth impacts not previously considered and analyzed in the Draft EIR. Therefore, the project would

not result in substantial unplanned population growth and impacts in this regard would be less than significant.

I12-7 The commenter raises concern regarding adequate parking facilities; refer to MR-4.

I12-8 The commenter raises concern regarding proper noticing of the project. Refer to response to Comment I12-2 above.

I12-9 The commenter generally discusses the CUSD lease proceeds and the intended use of the funds. Refer to MR-2.

I12-10 The commenter provides a concluding statement. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I12-11 The commenter requests information regarding the possibility of considering other alternative development opportunities on-site. CEQA and the CEQA Guidelines require consideration of a reasonable range of alternatives. In this case, the Draft EIR analyzes two alternatives to the proposed project, the "No Project" Alternative and the "Village Commercial/Residential (VC/R) Zoning District Development" Alternative. These alternatives satisfy the general purposes of CEQA – i.e., to enable the decision-makers to compare the impacts of approving the project with the impacts of not approving the project (for the No Project alternative), and to determine whether an alternative would reduce any potentially significant impacts associated with the proposed project (for the VC/R Zoning District Development alternative). Nevertheless, while these alternatives meet the purposes and requirements of CEQA, members of the public are welcome to propose other alternatives as a policy matter for consideration by the City. Also, refer to MR-5.

I12-12 The commenter generally discusses the divide of the community in their response to the project; those that want "reasonable" development and those with interests in the school district. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I12-13 The commenter raises concern regarding increased traffic and adequate parking facilities. Refer to MR-2 regarding transportation-related impacts and MR-4 regarding on-site parking standards.

I12-14 The commenter raises concern regarding maximum buildout of the site and requests the City consider the interests of the community members and protect their quality of life. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I12-15 The commenter raises concerns regarding overdevelopment of the City. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Rich Burnham <richardburnham85@gmail.com>
Sent: Thursday, February 9, 2023 2:02 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Apartments

A BIG NO!!!!!

Do not allow more apartments, we will fight this to the end. Find funding for the high school in other ways. What a SCAM!!!!

I13-1

**From:** Rich Burnham <richardburnham85@gmail.com>
**Sent:** Friday, March 3, 2023 9:33:34 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Re: Victoria Boulevard Apartments

Hi Belinda,

Do you plan to build apartments every time the high school needs funding?

What a joke! No thank you to bringing LA to OC. Dana Point doesn't need to become the next Marina Del crapola! This state already can't find the resources to avoid rolling blackouts and other BS cutbacks on everyday necessities. Makes ZERO sense but keep following the footsteps of our corrupt and idiotic governor.

Make sure to include those comments too in your report. Thanks and have a fantastic weekend!

I13-1 cont'd

## I13. RESPONSES TO COMMENTS FROM RICH BURNHAM, FEBRUARY 9 AND MARCH 3, 2023.

I13-1 The commenter opposes the project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

# VICTORIA APARTMENTS PROJECT CLARIFICATION POINTS

1. Victoria Bus Yard lease revenue is FAR LESS THAN the claimed $40,000,000 ! It is not earmarked for Dana Hills High School, only schools in Dana Point. I14-1

ANNUAL RENT – p.61 of Lease document

| YEAR | RENT | Running Total |
|---|---|---|
| 1 | $1,000,000 | $1,000,000 |
| 2 | $1,000,000 | $2,000,000 |
| 3 | $1,000,000 | $3,000,000 |
| 4 | $1,500,000 | $4,500,000 |
| 5 | $3,150,000 (maximum) ($2.500,000 minimum) | $7,650,000 ($7,000,000) |
| 6 | $3,564,000 (maximum) ($3,285,000 minimum) | $11,214,000 ($10,935,000) |

2. Project PHOTOS are misleading and DIMINISH THE MASSIVE SIZE compared to the rest of the neighborhood. (EIR pp.122, 123, 128, 129) I14-2

3. Construction hours are 7:00AM – 8:00 PM! This would place an undue stress burden on the surrounding community. I14-3

4. EIR TRAFFIC PROJECTIONS ARE GUESSES. Project calls for 499 bedrooms - with 2 people /room it could mean up to 1,000 residents. Some areas of Orange County average 2.9 people per unit. At that rate 349 units would house 1,012 people! I14-4

5. The EIR proposes a lower density project of 114 units totaling 178 bedrooms (p.433). This is more in line with the nature of the Dana Point/Capo Beach community. In addition, the South Cove Apartments/Condos (168 units) are a good fit with the community and show that a lower density is still economically feasible. I14-5

6. Drought and water shortages must be considered before addition of more residents to the system. Sewage processing is also a part of that equation. I14-6

7. What are the actual Low Income Rental Rates? Are they realistic for low income people? I14-7

Prepared by:

Brent Neumeyer, resident
34731 Calle Las Flores
Capistrano Beach, CA 92624

949-240-1332

VICTORIA APARTMENTS EIR COMMENTS

Prepared by Brent Neumeyer
neumeyerr@cox.net

Having reviewed the EIR there are several issues that I believe are of serious concern or simply incorrect.

1. TRAFFIC -

The traffic calculations and the resulting conclusion appear to minimize or diminish the effects of the traffic generated by this project. Table 2 on p.26 gives AM peak traffic at 155, and PM peak traffic at 204. Both of these numbers are low based on rule of thumb numbers which should be 0.7 x #of units, or 0.7 x 349 = 244 cars per hour peak. This number is taken form Mike Spack's website ( Mike Spack, PE, PTOE, an industry leader in traffic studies worldwide. See "Numbers every traffic engineer should know" )
Figure 17 on p.30 is incorrect, as the total traffic is much lower in and out of the complex than the projected 155, and far less than the more accurate 244.

Secondly, the total traffic on Sepulveda, Victoria and Camino Capistrano will double, more or less. The projected project traffic is estimated to be 2518 trips. The table on p335 of the EIR shows the following:

I14-8

3700 trips on Victoria between Doheny Park Road and Sepulveda
2500 trips on Victoria between Sepulveda and Camino Capistrano
2900 trips on Camino Capistrano between Sepulveda and Victoria

ADT Traffic on Domingo Ave is projected to increase from 400 to 1700. Therefore, it is safe to say that traffic will pretty much double (or worse).

Third, all of these numbers are predictions, not facts. With 499 total rooms, the complex could easily house 700 – 1000 residents, which would generate far more traffic.
The recent census found the average number of occupants per unit was 2.73. With that figure in mind, 2.73 x 349 = 952 residents, and potentially 952 cars! For those who take the northbound 5 onramp at Stonehill and Camino Capistrano (which is currently so bad that an LOS of E, not B or C, is more appropriate), this project will make things far worse!

Therefore, EIR traffic estimates are ***Gross Underestimates*** **and** ***Minimize the Actual Congestion*** this project will create.

2. DENSITY-

As submitted the project would fit 349 units on 5.5 acreas (4.4 in reality). That's a density of 63.5/acre (79.3/acre in reality). The California Coastal Commission's approval of the Doheny Village Plan limits the number of units to 30/acre for sites less than 10 acres. This is more in line with the character of the Dana Point/Capo Beach community. The EIR proposes a lower density project of 114 units totaling 178 bedrooms (p.433). In addition, the South Cove Apartments/Condos (168 units on 4.4 acres) are a good fit with the community and show that a lower density is still economically feasible.

I14-9

3. WATER SUPPLY and WASTEWATER MANAGEMENT-

Drought and water shortages must be considered before addition of more residents to the system. Sewage processing is also a part of that equation. SCWD shows plans to increase water supplies on p.374 of the EIR. Those plans are not based on actual supplies of water. Though current rain and snow numbers look good, ***we are still in a DROUGHT***! There are 3 sides of drought –

1. Major Resevoirs – we will need a lot more precipitation for them to be filled.
2. Rivers – these will be full this spring, but not all of that water can be used for our needs.
3. Ground water supplies will need far more time to recharge. It is estimated that it would take at least 3 – 5 rainy seasons just like we have been experiencing. It is doubtful we will have such luck.

I14-10

Therefore, ***SCWD has no bases upon which to assume they will be able to meet our current water needs***, let alone those of the project.

4. PROJECT SCALE -

The proposed Victoria Apartments complex would be the tallest housing structure in Dana Point/Capistrano Beach. As seen in the pictures at the end of this commentary, it dwarfs the surrounding neighborhood. Though some parts are attractive, it is far too large for the surroundings. Imagine the Eiffel Tower or the Great Pyramid in the middle of Doheny Village or downtown Dana Point! Toll Brothers images are deceptive as they are shown in wide angle from aerial views, behind bushes from the freeway, and again wide angle from the street at Sepulveda and Victoria intersection. All of these images seek to minimize the ***Detrimental Visual Impact*** that this structure will have on the neighborhood. It will also set a dangerous precedent that would invite construction on that scale to ruin the historical beach community character of Dana Point as a whole. We are not Irvine!

I14-11

# Attachment 3: Applicant-Provided Supplemental Renderings



VIEW SOUTH FROM I5

VIEW EAST ON DOMINGO



## VIEW EAST ON VICTORIA






## VIEW SOUTH ON SANTA ROSA



## I14. RESPONSES TO COMMENTS FROM BRENT NEUMEYER, FEBRUARY 9 AND MARCH 6, 2023.

I14-1 The commenter states that the revenue from the lease of the project site is less than $40 million and that the money is designated for schools in Dana Point and provides a breakdown of annual rent. Refer to MR-3.

I14-2 This comment states that the key view analysis in the Draft EIR is misleading and diminishes the building size compared to the surrounding structures. Refer to MR-6. Also, for information purposes, the Applicant has provided renderings of the proposed project from the public views provided by the commenter; refer to Attachment 3, *Applicant-Provided Supplemental Renderings*, provided following this response. These renderings depict the overall massing/scale of the proposed structures, setbacks, proposed landscaping, as well as maintains existing structures/landscaping features in the foreground views (which would remain upon completion of the proposed project. These renderings are intended to provide information pertaining to the overall massing of the proposed project and are subject to change as part of the final design review process with the City of Dana Point.

I14-3 The commenter raises concerns regarding the allowable hours for construction hours (7:00 a.m. to 8:00 p.m. Monday through Saturday) and states that construction of the project would place undue stress and burden on the surrounding community. This construction schedule is consistent with the City's Municipal Code Section 11.10.014, *Special Provisions*, which required that construction of future projects would be limited to occur between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday and would be prohibited on Sundays and Federal holidays. The project would be required to comply with these allowable hours for construction consistent with the City's current standard practices.

I14-4 The commenter states that the Draft EIR traffic projections are guesses and the commenter provides their estimates of future residences. Refer to MR-2 regarding transportation-related impacts. As discussed in Draft EIR Section 5.12, *Population and Housing* (page 5.12-6), based on the City's average household size of 2.28, the 349 proposed units would introduce up to 796 additional residents to the City. Revisions to the project, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, include that the project's dwelling unit total would be reduced by 43 dwelling units. Consequently, the total number of additional residents would decrease from that analyzed in the Draft EIR. Therefore, the revised project would not foster population growth greater than that analyzed in the Draft EIR.

I14-5 The commenter states that the Draft EIR proposes a lower density project, which is more in line with the surrounding community. The lower density project discussed in the Draft EIR is part of the mandated alternatives analysis in Draft EIR Section 7.0, *Alternatives to the Proposed Project*, not the actual proposal for development. Refer to MR-5.

I14-6 The commenter states that drought and water shortages along with sewage processing should be considered before adding more residents to the system. As discussed in Draft EIR Section 5.12, *Public Services/Recreations and Utilities* (pages 5.13-5 through 5.13-8 and 5.13-36 through 5.13-39), South Coast Water District (SCWD) provides water and wastewater services to the project site. Refer to MR-7. Additionally, as discussed in Final

EIR Section 2.0, revisions to the project include that the project's dwelling unit total would be reduced by 43 dwelling units. Consequently, the total number of additional residents would decrease from that analyzed in the Draft EIR.

I14-7 The commenter requests information regarding the rates of the affordable units and questions whether the rates would be realistic for low-income people. Refer to MR-1.

I14-8 The commenter raises concern regarding traffic-related impacts. Refer to MR-2.

I14-9 The commenter raises concern regarding site density. Refer to response to Comment I14-5 above and MR-5. Further, as discussed in Final EIR Section 2.0, revisions to the project include that the project's dwelling unit total was reduced by 43 dwelling units by reducing the maximum number of floors permitted for the building. Consequently, the density would be reduced from 63.3 dwelling units per acre to 55.5 dwelling units per acre.

I14-10 The commenter states that drought and water shortages along with sewage processing should be considered before adding more residents to the system. Refer to response to Comment I14-6 above.

I14-11 The commenter raises concern regarding the proposed height of the structure. Refer to response to Comment I14-2 above and MR-6.

# Attachment 3: Applicant-Provided Supplemental Renderings



Brent Neumeyer



Toll Brothers Apartment Living



Brent Neumeyer



Toll Brothers Apartment Living



Brent Neumeyer




Toll Brothers Apartment Living



# Applicant-Provided Supplemental Renderings



Brent Neumeyer



Toll Brothers Apartment Living



# Applicant-Provided Supplemental Renderings

**From:** Blake Davis <blakeredblue@gmail.com>
**Sent:** Sunday, February 12, 2023 2:16:33 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blvd. Apts.

Hi Belinda:
I've looked at the EIR and other project info. I'm in favor of this project moving forward. Housing like this, rather than $1 million+ condos and houses, is desperately needed in our city and throughout coastal areas of SoCal. My two 30ish year old children would love to live near here but supply is very limited. Every new unit that's built means another household that can enjoy the same great lifestyle current residents like me already enjoy. I've owned and lived in my home on Malaga for 10 years.
Thanks,
Blake Davis
34082 Malaga Dr.
Dana Pt.
949-339-9585

I15-1

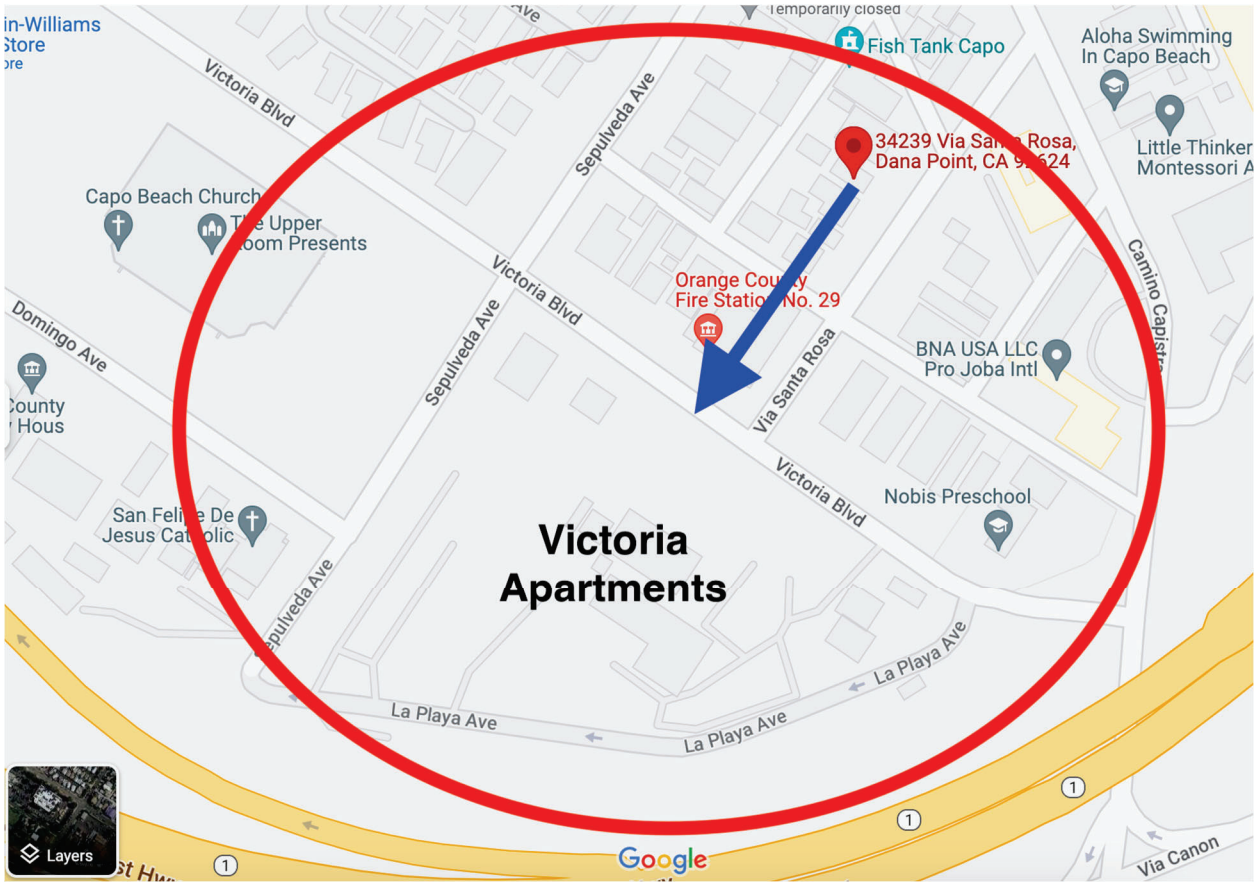
## I15. RESPONSES TO COMMENTS FROM BLAKE DAVIS, FEBRUARY 12, 2023.

I15-1 The commenter generally supports the project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Kymberlee <lagunatic5@yahoo.com>
**Sent:** Tuesday, February 14, 2023 8:19 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Response to Environmental Impact Report: Via Santa Rosa Resident/Doheny Village

Dear Belinda Denise/Planning Committee,

My name is Kymberlee Stanley, and I purchased 34239 Via Santa Rosa, a duplex two blocks from the proposed Victoria apartment proposal, in July, 2022. I have attached photos of my upstairs studio on Via Santa Rosa that is a 30 day plus rental, and is my primary source of income. I also have a lower level front house in this duplex. The upper studio unit is above/higher than all the neighbors, with an unobstructed view between my duplex and the proposed Victoria 6-7 story parking structure. This blue arrow in the diagram shows exactly my view of the sunsets every evening.




I16-1

I have been following the Victoria proposal since before I purchased the units, and I have spoken at the coastal commission Zoom meeting for STR permit approval a couple months ago. I plan to apply for a STR permit soon, as I am zoned for both commercial and residential. The Victoria apartments timeline of a 2-3 year construction project would have a profound “environmental” impact for me financially and personally. I am an artist and a psychotherapist, and my studio is below the studio in the garage. I rent out one or both units for my sole income. This is my only rental property. This scares me.

This is about me and my “Garibaldi” art studio located on the property as well: kymberleestanley.com

I am writing to educate the city and its building contractors, of the **Neighborhood resident/business** impact, as in addition to the environmental impact report. I am not OPPOSED to the project; instead, I would like the builders and the city to **agree on a neighborhood partnership that would somehow GIVE BACK to the immediate Doheny Village neighbors within a 2 block radius of the proposed project**. We are the ones who will be most impacted. I16-1 cont'd

So far, I am only hearing about how the project would **TAKE** from us.

<u>Here is how it would impact me directly:</u>

1. **View abatemen**t: 7 story parking structure **may** block sunset views, based on my second story balcony view. This view is the main reason I purchased this property, and why it is special. My studio balcony is the highest point between the project and my unit, so I see over all other houses and the fire department. I16-2

2. **Light pollution**: nighttime safety lights, apartment door lights and green area park lights may shine directly into the eyes of my renters or myself when staying at my studio and enjoying the deck at night. I16-3

3. **Noise pollution**: 2-3 years of jackhammers, trucks, steel welding, etc. all hours of the day. People rent my studio for a peaceful getaway at the beach. Enough said. I16-4

4. **Loss of income/rental complaints**: renters ask if the unit is quiet before renting. What am I supposed to say? It will be harder to rent, in a high income rental area where people have high expectations. I am expecting at least 1 month of loss of rental income each year the project is in contruction, or $5,000 a month, once a year x 3 years = $15,000 total throughout the project. I16-5

5. **More traffic** exiting Via Santa Rosa to get to Doheny Village - construction and regular commuters. I16-6

6. **Less** street parking from apartment overflow or visitors. I16-7

7. **Dust/dirt** in air during building that will settle on my deck daily. I16-8

How would this construction project, and its aftermath, **give ANYTHING BACK** to me/us?

My proposal below is merely a list of minimal "peace offerings/truces” for the homeowners that live and work within a 2 block radius of the Victoria project in Doheny Village. This is going to be a long relationship. I don't want to resent it and the city for years.

<u>Possible "builder give-backs" to Doheny Village residents/business owners:</u> I16-9

1. An annual one-month rental income loss reimbursement for STR’s or long term rentals impacted by income lost due to noise of construction for 2-3 years. For me, I am estimating, a 5k loss (one month rent) lost to complaints, or difficulty renting monthly during a construction zone. So, $5,000 x 3 years = $15,000. Who absorbs these losses? Is it all on the homeowner?

2. All overhead outdoor lights installed on apartments be installed as down-lit lights only, with no “light overspray” reaching out across the neighborhood. This includes park lights. Lights could be turned down to lower level strengths. What would I see at night or sunset once this is built?

3. Does the aparment include a **gym** or other amenities for residents? What if residents living within a 2 block radius receive an annual pass or optional low-cost buy in?

4. **Optional parking** structure parking spot to be offered or purchased at cheap annual rate for residents who have lost their street parking. It’s already a pinch. My residents walk three blocks to get a spot on the weekends.

5. Will there be a restaurant or **coffee shop** built for the apartment residents? There is currently no walkable coffee shop for us other than the car wash. This could be nice for us.

6. Will your apartment building be a part of easier walking path to beach? Not sure if this will be concurrent with coast commission village plan or not.

7. A "complaint line” open between the builders and the neighborhood that is manned and responsive.

I16-9
cont'd

8. What will be building construction times? Will they be posted and enforced? I would suggest: 8:30-4:00 pm M-F only. No weekends.

9. Develop a partnership between the  apartment project and the local artists. Via Santa Rosa and the next street alone has many industrial artists, hair dressers, painters like me, designers, 3 architects, mural artists, etc. How are they considered for city beautification along with the Doheny Arts Village development? This could be a local collaboration. I myself am a professional painter who paints large paintings of the water, coastline, etc. My neighbor Ron Whitworth is a cutting edge industrial/steel designer that could build the hand railings, gates, etc.

10. Link this apartment project as part of Doheny Village ARTs development by establishing a commission between the city and the builder to intentionally connect the local artists with it.

I ask for a written “local Doheny Residents and Business owners” proposal from the builders/city commission to offer something back to us. This seems one-sided and it should be a partnership with give and take.

Thank you,
Kymberlee Stanley
Owner 34239 Via Santa Rosa
Doheny Village

My sunset spot









## I16. RESPONSES TO COMMENTS FROM KYMBERLEE STANLEY, FEBRUARY 14, 2023.

I16-1 The commenter raises concern regarding the impacts that the project would have on the neighborhood residences and businesses. The commenter suggests that the builder and City agree to a neighborhood partnership that would give back to the Doheny Village community within a two-block radius of the proposed project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I16-2 The commenter raises concern regarding the potential obstruction of existing sunset views from a residential use, second story outdoor balcony, located approximately 336 feet northeast of the project site as a result of project implementation (specifically the proposed parking garage). This comment is acknowledged. Refer to MR-6. Additionally, scenic views and vistas from public vantage points are protected under CEQA and analyzed in Draft EIR Section 5.2, *Aesthetics/Light and Glare* (pages 5.2-1 through 5.2-27). In particular, views that include open ocean and beaches were specifically considered. Based on the existing structures, topography, and landscaping, as well as the proposed siting/massing of the structure, the Draft EIR determined that potential impacts to scenic views/vistas are less than significant. Further, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, revisions to the project include that the project's dwelling unit total was reduced by 43 dwelling units by reducing the maximum number of floors permitted for the building. Specifically, the maximum number of building floors were reduced to range between two to four floors along the northern elevation (along Victoria Boulevard); two to five floors along the eastern elevation (along PCH); four to five floors along the southern elevation (along PCH); and two to five floors along the western elevation (along Sepulveda Avenue). Overall, the revised project would not create any new substantial impacts related to aesthetics that were not previously considered and addressed in the Draft EIR. Rather, aesthetic impacts would be further reduced from those analyzed in the Draft EIR

I16-3 The commenter raises concern regarding the nighttime lighting proposed as part of the project. As discussed in Draft EIR Section 5.2, *Aesthetics/Light and Glare*, all proposed lighting would comply with the exterior lighting requirements included in the proposed Specific Plan Design Guidelines and Municipal Code Section 9.05.220. The lighting guidelines provided in the Specific Plan recommend the use of street lighting (per City standards), and security lighting along pedestrian walkways, as well as sustainable light emitting diode (LED) lighting for outdoor applications, and appropriate color spectral distribution to reduce glare and enhance safety and navigation. The Municipal Code requires exterior lighting to be shielded or recessed so that direct glare and reflections are contained within the boundaries of the parcel and must be directed downward and away from adjoining properties and public rights-of-way. Blinking, flashing, or lighting of

unusually high intensity or brightness is not allowed under the Municipal Code. Impacts would be less than significant in this regard.

I16-4 The commenter raises concern regarding potential construction noise impacts to surrounding residential uses and rental properties. The proposed project construction schedule is consistent with the City's Municipal Code Section 11.10.014, *Special Provisions*, which required that construction of future projects would be limited to occur between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday and would be prohibited on Sundays and Federal holidays. The project would be required to comply with these allowable hours for construction consistent with the City's current standard practices.

I16-5 The commenter raises concern regarding potential loss of short term rental income due to construction noise associated with project implementation. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I16-6 The commenter raises concern regarding increased traffic as a result of project implementation. Refer to MR-2.

I16-7 The commenter raises concern regarding parking impacts as a result of project implementation. Refer to MR-4.

I16-8 The commenter raises concern regarding construction impacts related to dust and dirt. As discussed in Draft EIR Sections 5.4, *Geology and Soils* (pages 5.4-15 through 5.4-16) and 5.8, *Air Quality* (pages 5.8-1 through 5.8-25), the project would be required to comply with South Coast Air Quality Management District (SCAQMD) Rule 403, which would require implementation of dust control measures during construction activities. Overall, the project would not result in significant short- and long-term air quality impacts. The project's emissions would not exceed the SCAQMD adopted construction and operational thresholds.

I16-9 The commenter provides recommendations for "builder give-backs" to the Doheny Village residents and business owners located within a two-block radius of the project site. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. Refer also to responses to Comments I16-3 above regarding lighting, I16-4 above

regarding construction noise, I16-5 above regarding loss of short term rental income, and MR-4 regarding parking.

As discussed in Draft EIR Section 3.4, *Project Characteristics* (pages 3-8 through 3-11), the project proposes a variety of both private and public open space areas. Further, as discussed in Final EIR Section 2.0, revisions to the project include that the project's public open space acreage would slightly decrease from 1.10 acres to 1.065 acres which would provide additional contributions to alleviating the City's parkland demand. Public improvements associated with the project include a public park with active and passive recreation amenities (Victoria Shore Park) proposed at the southeastern corner of Victoria Boulevard and Sepulveda Avenue, enhanced landscape and streetscape amenities, additional public parking within the right-of-way areas, construction of a cul-de-sac at the Sepulveda Avenue terminus, a Dog Park, and two public paseos. Victoria Shore Park may include an art wall, boardwalk deck, outdoor exercise station, activity lawn, surf benches and lounge area, fire pit lounge deck, landscaping elements, canopy palms, and enhanced architectural features. The Dog Park and paseo features may include a dog run and synthetic lawn, dog water fountain and trash/dog waste station, art wall, dog art sculptures, children's play elements, public access walking/biking trail, seating area with benches, drivable grass with drivable turf, and architecturally enhanced hardscape features. The project's primary community entry occurs on Sepulveda Avenue. As a gateway into the development, the Arrival Promenade would include entry features designed to establish a "sense of place" and function as common open space. The Arrival Promenade may include enhanced entry drive paving, boardwalk steps, boardwalk paseo, bike storage, ADA lift, art wall, parkway landscape, synthetic lawn, benches, surfboard storage, showers and hose down area. Common open space areas may include benches, enhanced boardwalk paving, lounge and dining areas, outdoor games, synthetic lawns, outdoor kitchens and BBQ areas, fountains, and public art. Mixed-use facilities, such as a retail coffee shop, is not proposed as part of this project.

Art elements such as murals, sculptures, and decorative water fountains would be designed to create artistic harmony between the community's buildings, landscape, and open spaces. As discussed in the Victoria Boulevard Specific Plan Section 4.5, Art-in-Public-Places Guidelines, the project is subject to Municipal Code Chapter 9.05.240 and Specific Plan guidelines for inclusion of public art, water features, and other decorative elements.

The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Jim Waggoner <JimW@ipeontime.com>
Sent: Tuesday, February 14, 2023 11:43 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Emailing: img02142023_0002.pdf

Good day Ann Deines, I live on the corner of Fortuna and Via Canon. I would look at the travel of cars. We are experiencing over double the traffic  where we live from the new homes that have been built up on the hill from us. People do not stop at the stop sign on Fortuna and Via California now and they speed done Via Canon. I am concerned about the access that the fire trucks need to go to afire if there are more cars on the roads around the fire department. There are too many cars parked on the street now as you can see in the pictures. I am very concerned about more traffic around the possible new apartments. Thank you for listening, Jim Waggoner 714 984 4783

I17-1

## I17. RESPONSES TO COMMENTS FROM JIM WAGGONER, FEBRUARY 14, 2023.

I17-1 The commenter raises concern regarding traffic congestion and operations, fire protection services, and adequate parking. Refer to MR-2 regarding transportation-related impacts, response to Comment A1-1 regarding fire protection services, and MR-4 regarding on-site parking standards.

February 14, 2023

Belinda Ann Deines, Principal Planner
City of Dana Point
Planning Division
33282 Golden Lantern
Dana Point, CA 92629

Subject: Notice of Availability (NOA) of a Draft Environmental Impact Report (Draft EIR)

Project Title: Victoria Boulevard Apartments
State Clearinghouse No. 2021070304

Project Applicant: City of Dana Point

## Comments In Response to this Notice

In the Certification of the Amendment to modify and add provisions to the land use element of the General Plan and to the zoning code, the stated purpose is, "…to preserve and enhance the eclectic combination of commercial, light industrial, and residential mixed use in the Doheny Village". The mission to preserve and enhance the community is not accomplished by the Victoria Boulevard Apartments as proposed by Toll Brothers because the large scale of this project will instead adversely impact the community. Density not properly managed impacts quality of life. With this as a prime concern, the land use designation for the Capistrano Unified School District Bus Yard currently has a maximum density of 30 dwellings an acre per the local coastal program amendment approved on February 9, 2023 by the Coastal Commission.

The Toll Brothers' written presentation at Dana Hills High School on November 16, 2022 stated, "Maximum number of units are not to exceed 365 units". Their statement that, "Allowable units derived from the maximum density of 50 dwelling units per acre allowed elsewhere in Doheny Village" is misleading, as this density according to the Doheny Village zoning code is only for properties that are in excess of 10 acres. The zoning for the bus yard is 30 units per acre, as illustrated on the exhibits attached to the Amendment recently approved by the Coastal Commission. There are approximately 4.5 buildable acres after deducting the 1.1 acres as open space. Using current zoning, this would allow approximately 135 units---significantly less than the proposed 349 apartment units. Their proposal of 349 units far exceeds the zoning density established and approved by the Coastal Commission. I18-1

The proposed Toll Brothers Development is a massive concentration of residential units without any additional infrastructure to support the number of people and vehicles that will be added to the already-crowded streets in Doheny Village. The existing streets will be the transportation corridor which is supposed to accommodate the additional 1.9 cars per apartment x 349 apartments, or 663 additional vehicles. The vehicular traffic I18-2

leaving the Apartments will be limited to only one viable access street for going south or into Dana Point proper---Victoria Blvd. Domingo Street is not an option because there is no signal at the intersection of Domingo and Doheny Park Road, and turning left there is unsafe due to excessive cross traffic. If a signal were to be installed it would impede traffic on Doheny Park Road, since there are already signals at both Las Vegas (the freeway exit) and Victoria Blvd.; an additional signal would create a major traffic backup on Doheny Park Road, which is a major commercial corridor servicing the Big 5 shopping center and Costco. Camino Capistrano is the only other access route leading to Doheny Park Road, but one can only turn right at that corner. The backup at the Victoria signal with the additional quantity of vehicles from the proposed development would be detrimental to the community. Another concern is the reduced access to Doheny Park Road by emergency vehicles from the Fire Station, which is directly across from the development on Victoria Blvd. The two closely-spaced traffic signals on Doheny Park Road at Las Vegas and Victoria Blvd. now control the flow of traffic from Costco and the Big 5 shopping center, current businesses and residences, folks from San Juan Capistrano traversing Doheny Park Road to Pacific Coast Highway or the on-ramp to the 15 freeway southbound to San Diego. Doheny Park Road is frequently backed up at both intersections during peak travel times. An additional 663 vehicles from this project will create an untenable traffic situation, which will impact the safety and lifestyle of the Doheny Village community. Going back to the mission, the area will not be “preserved and enhanced” by this project---it will be negatively impacted by the proposed density and pose safety concerns.

I18-2 cont'd

Respectfully submitted,

Larry Robinson
34233 Via Santa Rosa
34231 Camino Capistrano
Capistrano Beach, CA 92624

## I18. RESPONSES TO COMMENTS FROM LARRY ROBINSON, FEBRUARY 14, 2023.

I18-1 The commenter raises concern regarding the allowable density of the project site. The proposed Victoria Boulevard Specific Plan provides planning and regulatory standards that would supersede the General Plan and Municipal Code standards for the Specific Plan area. As discussed in Draft EIR Section 3.4, *Project Characteristics* (page 3-13) and shown in Table 3-1, *Victoria Boulevard Specific Plan Development Standards*, per the Specific Plan Development Standards, the development density on-site would not exceed 63.3 dwelling units per acre, yielding a maximum of 349 dwelling units on the 5.51-acre project site, which is below the maximum 356 dwelling units (65 dwelling units per acre) allowed under the Specific Plan. Further, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, revisions to the project include that the project's dwelling unit total was reduced by 43 dwelling units by reducing the maximum number of floors permitted for the building. Consequently, the density would be reduced from 63.3 dwelling units per acre to 55.5 dwelling units per acre. Refer to MR-5 regarding alternatives considered for the project. The "Village Commercial/Residential (VC/R) Zoning District Development" Alternative would be consistent with adjacent zoning per the Doheny Village Zoning District Update; however, the Draft EIR determined that the "VC/R Zoning District Development" Alternative would not achieve the project's objectives to the extent of the proposed project.

I18-2 The commenter raises concern regarding increased traffic and related roadway safety due to added residents from the proposed project. Refer to MR-2 regarding traffic congestion. As discussed in Draft EIR Section 5.7, *Transportation* (pages 5.7-12 through 5.7-17), emergency access during both construction and operations would be maintained on-site. Project site plans would be subject to review by the City, Orange County Fire Authority (OCFA), and the Orange County Sheriff Department (OCSD) to ensure adequate emergency access and emergency response is provided and for compliance with fire and emergency access standards and requirements. With the implementation of Mitigation Measure TRA-1 (preparation of a Construction Management Plan), and by complying with Municipal Code regulations for emergency access design (Municipal Codes 8.02 and 8.04), impacts to the emergency access of the project site would be reduced to less than significant levels.

As discussed in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-30 through 5.13-32), the project would not result in the need for the construction of any new or physically altered fire protection facilities. The project would be required to comply with General Plan Land Use Element Policy 3.1 and pay the respective fire-related development fees and exactions to the City. Additionally, as a standard condition of approval, the project Applicant would be required to enter into a Secured Fire Protection Agreement with OCFA. The agreement would specify the Applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel. Although the proposed project is expected to increase demand for OCFA services, the demand would not be substantial or result in the need for additional or expanded fire protection facilities, and would not adversely impact service

ratios, response times, or other OCFA performance standards.[2] Further, revisions to the project, as discussed in Final EIR Section 2.0, include that the project's dwelling unit total would be reduced by 43 dwelling units. Consequently, the total number of additional residents would decrease from that analyzed in the Draft EIR. Therefore, the revised project would not foster population growth greater than that analyzed in the Draft EIR. Therefore, the project would result in a less than significant impact in this regard.

[2] Written Communication, Orange County Fire Authority, July 1, 2021.

**From:** Richard Law <rlaw1@mac.com>
**Sent:** Sunday, February 19, 2023 4:48:27 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Draft EIR Workshop, Victoria Boulevard Apartments

Belinda,

The following are my comments on the Draft EIR for the Victoria Boulevard Apartments. Please forward to Planning Commissioners and others who may find it useful.

For those who live in or pass through Doheny Village and Capistrano Beach, Victoria Boulevard Apartments will be experienced primarily from the project frontages on Victoria Boulevard and Sepulveda Avenue. Victoria Boulevard will carry more traffic than Sepulveda Avenue but buildings fronting on both of these streets will be highly visible from within the village. These views are most important and will determine how well the project fits in.

In the Draft EIR, Item 3.6, GOALS AND OBJECTIVES, there is one objective that stands out. "ENSURE HEIGHT AND MASSING OF FUTURE DEVELOPMENT WITHIN THE PROJECT AREA IS SENSITIVE TO EXISTING STREETSCAPE, ESPECIALLY ALONG VICTORIA BOULEVARD."

In the Draft EIR this OBJECTIVE is only addressed for the buildings by height limits as indicated in EIR Exhibit 3-7 Reduced Building Height Zones, attached here. The building height limit for buildings fronting on Victoria Boulevard is up to 50 feet in height. The building height limit on Sepulveda Avenue is up to 65 feet in height. Without additional standards or guidelines, this could allow the building or buildings fronting on Victoria Boulevard to all be 50 feet in height and the building or buildings fronting on Sepulveda Avenue to all be 65 feet in height. There are no development standards or guidelines in the Draft EIR that prevent this.

Taller Buildings of uniform height and unbroken massing tend to appear much more massive than buildings of varied height and varied building massing. Buildings done in this manner fronting on Victoria Boulevard and Sepulveda Avenue would "cause a significant environmental impact" by not being "SENSITIVE TO THE EXISTING STREETSCAPE." This should be categorized as a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. I19-1

We have worked with the developer to try to achieve variety in building height and massing for the building frontages along Victoria Boulevard and Sepulveda Avenue. The following exhibits are fairly recent building design concepts by the developer. These exhibits are not included in the EIR.

The First Exhibit is looking west on Victoria Boulevard at street level. Variation in building height and massing is evident in this street scene.

The Second Exhibit shows the overall building frontage along Victoria Boulevard. There are 3 story building segments up to 35 feet in height and 4 story building segments up to 50 feet in height. Open spaces provide breaks in the building massing. This treatment of the buildings fronting on Victoria Boulevard help make the transition in scale to the existing village. This could be considered "SENSITIVE TO THE EXISTING STREETSCAPE." Development standards and guidelines that require and encourage this should be included in the Specific Plan and addressed in the EIR.

The Third Exhibit shows the overall building frontage along Sepulveda Avenue. The building shown is a continuous 5 stories, up to 65 feet in height. There are no breaks in the building massing. The appearance of the building along Sepulveda would be massive. It does not help make a transition in scale to the existing village. It is not "SENSITIVE TO THE EXISTING STREETSCAPE." This should be categorized as a "potentially significant impact." Development standards and guidelines that prevent this should be included in the Specific Plan and addressed in the EIR.

The following are suggestions for development standards and guidelines for building frontages on both Victoria Boulevard and Sepulveda Avenue as the OBJECTIVES are the same: The overall project building height limit is 65'. Create a 40' wide reduced building height zone on both street frontages. Require at least 2 reduced building heights: up to 3 story building segments up to 35 feet in height for at least 65% of the building frontage and up to 4 story building segments up to 50 feet in height for no more than 35% of the building frontage.. Require at least 2 open space breaks in the building massing at least 40' in width on each building frontage.

I19-1
cont'd

From within Doheny Village, Victoria Boulevard Apartments will be experienced primarily from the project frontages on Victoria Boulevard and Sepulveda Avenue. This is true no matter what the final project configuration, building height or number of units turns out to be. This project OBJECTIVE should still apply: "ENSURE HEIGHT AND MASSING IS SENSITIVE TO EXISTING STREETSCAPE."

Exhibits:
Exhibit 3-7, Reduced Building Height Zones
Exhibit 1, Looking west on Victoria Boulevard at street level
Exhibit 2, Overall building frontage on Victoria Boulevard
Exhibit 3, Overall building frontage on Sepulveda Avenue




NOT TO SCALE

Michael Baker INTERNATIONAL

12/2022 | JN 179386

VICTORIA BOULEVARD APARTMENTS
ENVIRONMENTAL IMPACT REPORT

**Reduced Building Height Zones**

**Exhibit 3-7**







## I19. RESPONSES TO COMMENTS FROM RICHARD LAW, FEBRUARY 19, 2023.

I19-1 The comment states that the proposed project does not meet the project objective to "ensure height and massing of future development within the project area is sensitive to existing streetscape, especially along Victoria Boulevard." The comment provides suggested development standards at building frontages along Victoria Boulevard and Sepulveda Avenue including varied building heights within specified building segments with open space breaks. This comment is acknowledged. Refer to MR-6.

**From:** Cheryl Pribble <cheryljpribble@gmail.com>
**Sent:** Monday, February 20, 2023 3:19:51 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Apartments

Dear Ms. Deines,
My husband and I live on the bluffs above this development. We have many objections. It seems like too big a complex for such a closed space. That is a very land-locked area and placing over 349 apartments with all the people who will live in them seems overwhelming. Also, the design is too tall and does not match anything in the area. A six story parking structure does not fit with the neighborhood. There is not one building in that area that is that tall. The Doubletree, and the condos that were built across from the beach, are not that tall. This will stick out like a sore thumb in that residential neighborhood. With over 349 apartments, comes at least 349 cars!! This apartment will also bring too much traffic and congestion to the area. It is all just too much and not a good fit for the city of Dana Point. Please do not let them build this here. We think it would be a huge mistake to build such an apartment complex in that small space.
Thank you,
Chuck and Cheryl Pribble

I20-1

## I20. RESPONSES TO COMMENTS FROM CHERYL PRIBBLE, FEBRUARY 20, 2023.

I20-1 The commenter raises general concerns regarding building height, and traffic congestion and operations in Doheny Village and opposes the proposed development. This comment is acknowledged. Refer to MR-6 regarding building height and MR-2 regarding traffic-related impacts.

**From:** marisaboehme@gmail.com <marisaboehme@gmail.com>
**Sent:** Thursday, February 23, 2023 3:27 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blvd Apartments

To Ms. Deines,

Please reconsider the height of these buildings. So out of place in this community. Towering over everything else in the area. Blocking views from other properties. Adding hundreds of cars to our streets. Do we really need more luxury apartments? Aren't the (awful) new buildings in the lantern district enough? Are those apartments all rented? Waiting list for those? I21-1

Please stop allowing developers to come into our area and make such drastic changes.

Thank you,
Marisa Boehme
949-545-6101

## I21. RESPONSES TO COMMENTS FROM MARISA BOEHME, FEBRUARY 23, 2023

I21-1 The commenter raises concerns regarding the building height of the proposed project and its aesthetic impacts on the surrounding community; refer to MR-6.

The commenter also raises concerns regarding traffic congestion associated with the project. Refer to MR-2 regarding traffic congestion.

The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Debbi Mellah <beachbennett@cox.net>
**Sent:** Sunday, February 26, 2023 2:59 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** Michael Villar <MVillar@DanaPoint.org>
**Subject:** Victoria Boulevard Specific Plan

Hello Ms. Deines,

I plan to attend the meeting 2/27/23 at the DP Community Center for the VBSP.
I was reviewing the Existing and Proposed Development Standards and I am in shock that the existing maximum height is 31-35 feet/3 stories, and the developer is proposing a maximum height of 85 feet/ 6.5 stories.
Could you please direct me to any housing development in DP that is 85 feet/6.5 stories so I may drive by and assess the impact before the meeting?
I would also suggest the developer construct a temporary 85 foot tall structure at the proposed site so the public could have a better visualization of what impact the development would have. I live in Capo Beach, and when a new cell tower was proposed at Faith Lutheran Church, a mock up was done and it was terrifying. That project has not been started.

I22-1

Thank you for your time.

Debbi Mellah

## I22. RESPONSES TO COMMENTS FROM DEBBI MELLAH, FEBRUARY 26, 2023

I22-1 The commenter raises concerns regarding the proposed increase in maximum building height for the project site under the proposed Specific Plan; refer to MR-6.

From: Cox.net <xtolou@cox.net>
Sent: Monday, February 27, 2023 11:44 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Proposed dev't in Capo

Dear Ms. Deines

I am unable to attend tonight's meeting in person, but I would like to go on the record as being vehemently opposed to the increased allowance to 349 dwellings built at the bus yard location! It's understandable to provide housing for people. I don't begrudge the city for developing the area as long as it is intelligently done with consideration for a quality lifestyle for all, new and old residents. 349 dwellings puts unrealistic stress on traffic and water systems. It sounds like an agenda that benefits entities other than the residents of Dana Point. It feels like quotas for increased housing will be fulfilled, or money will be made. There isn't a logical explanation for that kind of proposed density. The traffic alone, from the estimated number of cars making trips to and from the complex, using the existing streets is unreasonable. I23-1
Please step back from the agenda of those who might be influencing you and imagine how to go forward with the best use and the thoughtful consideration of the residents of the city. This decision will have a very long lasting impact, possibly a century. Please consider the legacy of this very important issue. Step outside "the box"…listen to our residents tonight with an open mind, fairness and imagination.
Thank you for your service to our community,

Christine Maclean
(A 39 year resident)

## I23. RESPONSES TO COMMENTS FROM CHRISTINE MACLEAN, FEBRUARY 27, 2023

I23-1 The commenter opposes the project and raises concerns regarding the proposed density and its impact on traffic and water systems. Refer to MR-2, MR-5, and MR-7. Additionally, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, revisions to the project include that the project's dwelling unit total was reduced by 43 dwelling units by reducing the maximum number of floors permitted for the building. Consequently, the density would be reduced from 63.3 dwelling units per acre to 55.5 dwelling units per acre.

**From:** Bill Boehme <bill.boehme61@gmail.com>
**Sent:** Tuesday, February 28, 2023 3:21 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Apartment Complex

Belinda,
I was very upset in hearing what is being proposed for this complex. The developers are asking for a huge increase in maximum density of 30 dwelling units per acre to 63.3 dwelling units per acre. In order to achieve this density they would have to get permission to raise the height building standards that have been set for years. This increased height would ruin the look of Dana point. This is not LA where apartment buildings are the norm. Many of us were upset in the development in the Dana Point Lantern district where the buildings were too tall. It feels like you are driving through a tunnel along PCH next to those apartment buildings. Currently all these buildings are not even fully rented. And now we're talking about letting developers build even higher. This is crazy! Why are we doing this? So the developers can make more profit. The developers should have to follow the current standards. We are ruining the look of Dana Point and what attracts everyone to live here. I24-1

I am vehemently opposed to raising the roof on height building standards.

Sincerely,

Bill Boehme

## I24. RESPONSES TO COMMENTS FROM BILL BOEHME, FEBRUARY 28, 2023

I24-1 The commenter raises concern regarding the project's proposed density and maximum building height; refer to MR-6. Additionally, as discussed in Final EIR Section 2.0, *Revisions to Information Presented in the Draft EIR*, revisions to the project include that the project's dwelling unit total was reduced by 43 dwelling units by reducing the maximum number of floors permitted for the building. Consequently, the density would be reduced from 63.3 dwelling units per acre to 55.5 dwelling units per acre.

**From:** vrmehta@pacbell.net <vrmehta@pacbell.net>
**Sent:** Wednesday, March 1, 2023 3:29:31 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Inputs for Victoria Blvd Apartment Project

Dear Ms. Deines,

I am writing to you in regards to the Victoria Blvd Apartment project being planned for the existing CUSD bus yard location in Doheny Village.

My wife and I own a home in Dana Bluffs community (Capistrano Beach) and have been impressed by the great job that Dana Point city planning department does to preserve the vibe and lifestyle of our city. The planning team keeps the community involved by actively seeking comments/feedback on various initiatives, which is unique and commendable. I recently read the lengthy Environmental Impact report on Victoria Blvd Apartments and wanted to provide some feedback which I hope you will take into serious consideration. I25-1

While new construction will revamp the relatively old, run down look of this particular land parcel, I and many of our neighbors believe that Victoria Blvd Apartment project will have a direct impact on us and other in our community. We regularly use Victoria Blvd and Camino Capistrano to access our homes and have some serious concerns for which we suggest the following:

1. Building almost 350 apartments will cause a significant traffic increase on these single-lane streets. We suggest that the number of apartments be reduced to no more than 250.
2. To ease this problem, we suggest that the proposed on-street angular parking on Victoria Blvd be dropped in favor of adding a lane. If the number of total apartments is reduced, there should not be a need for street parking. I25-2
3. Angular parking on Victoria Blvd will certainly cause accidents as people back their cars on what will surely be a busy street. I25-3
4. Widening the street is important for another reason – there is a fire station on Victoria Blvd and we need to provide as much room as possible for fire engines to navigate in case of emergency. I25-4
5. Please make the builder ensure that minimum restrictions are placed on the use of Victoria Blvd and Sepulveda Street during long construction periods and the noise is minimized. I25-5

Thank you for your attention. If you have any questions or would like to discuss further, please feel free to send me an email or call my cell (949) 702-3124.

Kind regards,

Vipul Mehta

## I25. RESPONSES TO COMMENTS FROM VIPUL MEHTA, MARCH 1, 2023

I25-1 The commenter raises concerns about increased traffic congestion due to the proposed project. Refer to MR-2. The commenter also requests consideration of a reduced density alternative; refer to MR-5.

I25-2 The commenter suggests the removal of angular street parking for the proposed project in favor for an additional vehicle lane along Victoria Boulevard. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I25-3 The commenter raises concern of the safety of angular street parking. Refer to MR-4. All proposed parking would be constructed in accordance with all laws and regulations, including applicable Building Code regulations for the purpose of design safety. Further, it is acknowledged that there are no roadway curvatures in the vicinity of proposed angled parking, which would restrict visibility of drivers traveling along Victoria Boulevard.

I25-4 The commenter raises concerns regarding adequate emergency vehicle access in the project area. As discussed in Draft EIR Section 5.7, *Transportation* (page 5.7-17), project site plans would be subject to review by the City and OCFA to ensure that adequate emergency access and emergency response is provided and that the project complies with fire and emergency access standards and requirements. The project would comply with the current design standards outlined under the California Building Code, California Fire Code, and related codes, including code regulations related to fire sprinkler systems, fire flow, fire hydrant spacing, paving, traffic signals within public access ways, building height, and occupancy and assembly occupancy standards. The project's proposed fuel modifications zones are also subject to review and approval by OCFA. Per applicable regulations, no project building will be occupied until City building department and OCFA have conducted final inspection and sign off.

I25-5 The commenter raises concerns regarding the usage of Victoria Boulevard and Sepulveda Street during construction and construction-related noise impacts. As discussed in Draft EIR Section 5.7, *Transportation* (pages 5.7-15 to 5.17-18), the Applicant would be required to prepare a Construction Management Plan (CMP) to be submitted and reviewed by the City of Dana Point Director of Public Works per Mitigation Measure TRA-1. The CMP would require the placement of traffic signs, traffic cones, and flaggers during temporary lane closures to assist pedestrians and traffic, coordination with the Director of Public Works regarding anticipated lane closures to ensure that operations of adjacent uses and emergency access are not impeded, and ensuring all construction-related parking and staging of vehicles are kept out of adjacent public roadways. Additionally, as discussed in Draft EIR Section 5.11, *Noise* (page 5.11-17 through 5.11-19), construction-related noise impacts would be minimized by equipping all construction equipment with mufflers,

constructing temporary walls and noise barriers, and placing equipment staging sites away from the nearest noise sensitive receptors.

**From:** Nancy Blackburn <nruffalo@cox.net>
**Sent:** Wednesday, March 1, 2023 1:18:07 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Capo Beach 5 story building

Hi Belinda,
My name is Nancy Blackburn. I wrote to you before about Capo Beach. In regard to the leased land from Capistrano Unified on Victoria Road, I do not believe a five story rental complex can be supported by the property. There is not enough parking for such a monstrous project. Furthermore, it will cause major traffic congestion in that area. It was my understanding we have a two story maximum in Dana Point. It has been sneaking higher. I have lived here since the eighties. I love the fact that we can see the ocean while driving through and around town. That view is disappearing from development that doesn't consider why many of our residents chose to live here. I believe we need to maintain a low key beach community. That's what people come here for and admire about our town. Please consider not allowing the aforementioned property to be more than two or three stories. It will disrupt the air and eye flow as well as be too massive for our quaint community.
Sincerely,
Nancy Blackburn.

I26-1

## I26. RESPONSES TO COMMENTS FROM NANCY BLACKBURN, MARCH 1, 2023

I26-1 The commenter raises concerns regarding the project's proposed building height obstructing views of the ocean, increased traffic congestion, and not enough parking. Refer to MR-6 regarding proposed building height, MR-4 regarding on-site parking standards,MR-2 regarding to traffic congestion, and MR-5 regarding the lower density alternative considered as part of the Draft EIR.

**From:** Christine <1631cmj@gmail.com>
**Sent:** Thursday, March 2, 2023 11:46:14 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Doheny Village Plan

Hello Belinda,

I just saw a representation of the planned 350 units for an area zoned for 132 units.

I understand we need housing and affordable housing, but this project is too large. A smaller scale project would better fit in with the community, resources and footprint we need here to keep our beach town charm. So many So Cal beach towns have been ruined this way. We have an opportunity to develop our town, yet keep the charm. I'm hoping those in charge will also want that for our town.

I27-1

Best Regards,
Christine VandeSteeg
21 New York Ct
Dana Point, CA 92629

## I27. RESPONSES TO COMMENTS FROM CHRISTINE VANDEESTEEG, MARCH 2, 2023

I27-1 The commenter is concerned the project is too large and states that a smaller scale project would better fit the community. Refer to MR-5 pertaining to alternatives considered in the Draft EIR. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Mark Schutz <mark@masselectricinc.com>
**Sent:** Thursday, March 2, 2023 11:04:32 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Capo Beach Development

I live in Capo Beach and I am urging you not to let the 350 unit apartment complex get approved. This is a monstrous development and will ruin the area. Please try harder to keep Dana Point a beach community as it is slowly slipping away. I28-1

Mark Schutz

## I28. RESPONSES TO COMMENTS FROM MARCK SCHUTZ, MARCH 2, 2023

I28-1 The commenter opposes the project. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Christine Loock <cloock66water@hotmail.com>
**Sent:** Thursday, March 2, 2023 12:10:24 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Re: Doheny Plan --- NO!

Yes, that's correct.

Get Outlook for Android

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**From:** Belinda Deines <BDeines@DanaPoint.org>
**Sent:** Thursday, March 2, 2023 11:57:22 AM
**To:** Christine Loock <cloock66water@hotmail.com>
**Subject:** Re: Doheny Plan --- NO!

Hi Christine,

To clarify, is your email in response to the Victoria Blvd Apartments project?

Thanks,
Belinda

**Belinda Ann Deines**
*Principal Planner*

City of Dana Point | Planning Division
33282 Golden Lantern, Dana Point, CA 92629
(949) 248-3570 | bdeines@danapoint.org

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**From:** Christine Loock <cloock66water@hotmail.com>
**Sent:** Thursday, March 2, 2023 11:25:14 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Doheny Plan --- NO!

Dear Ms. Deines,

As an educator and solo mother to 2 pre/teenagers...I implore you to seek alternate commerce to the proposed Doheny Plan, opposite the fire station.

Our community middle and high school students need somewhere to go to have FUN. A bowling alley, skating rink, horse riding stable, movie theater, gymnasium. The community center is great for baseball, but offers little else for teens and tweens. The SC Outlets shoos them away (unfortunately but sometimes understandably, due to shoplifting risk), and we wonder why kids turn to drugs....of which our authorities can't keep up with demand.

Temporary housing, long or short term, is not the answer. Nor is building another assisted living facility for the elderly. This city needs to stay appealing and sustainable to young families. That means

I29-1

affordable sfr's with no HOA or Mello Roos, and no short term rental to keep residents invested in the community. Our kids don't need high rise luxury apartments that in investors will air/bnb. Our kids need homes, yards, and safe places to enjoy their friends without fear of abduction or being told to leave. Generations of teenagers growing up feeling unwelcome and unwanted only breeds adults reliant on substance, which perpetuates the cycle we are currently living. Nowhere to go, nothing to do, without being told to "get lost."

I29-1 cont'd

Please come up with something for young families that will encourage their children to stay and raise their own families in this beautiful coastal community we call HOME.

Kindly,

Christine Loock
34622 Camino Capistrano A
Capo Beach, CA 92624
949.300.5206

## I29. RESPONSES TO COMMENTS FROM CHRISTINE LOOCK, MARCH 2, 2023

I29-1 The commenter requests the project site be redeveloped with other land uses than the proposed development. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Ana Maria Slingluff-Barral <annba29@gmail.com>
**Sent:** Thursday, March 2, 2023 9:52:47 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria street apartments

Dear Ms.Daines,
My husband and I have been Capo Beach residents for 9 years and love the neighborhood. We are familiar with the zone and come here fairly often.
I am expressing here my opinion about the Victoria street apartment.
I think Dana Point desperately needs more diverse housing options. And the Doheny area could benefit from more people, which in turn could revitalize what is now still a slightly gritty neighborhood.
So in principle I support the project. Here are my concerns/suggestions:

- From what I have read, only a very small fraction of the units are actually affordable. I hope that these apartments will be earmarked so they are not bought up by investors or for vacation units.
- I hope that the city will make efforts to develop and expand public transit in the area. While I love the idea of the apartments, a 6-story parking structure does not sound that attractive.
- There should be a ban on using those units for short term rentals/airbnbs.

Thank you for the opportunity to comment. I saw a call on social media to oppose the plan, so wanted to provide an alternative opinion.
Ana Slingluff-Barral
Calle Naranja, Capo Beach

I30-1

I30-2

## I30. RESPONSES TO COMMENTS FROM ANA SLINGLUFF-BARRAL, MARCH 2, 2023

I30-1 The commenter generally supports the project but is concerned that the few affordable units will be purchased by investors for vacation units rather than for people who actually need affordable housing. The commenter raises concern on how affordable housing units will be allocated and requests to be protected from investors and/or vacation use. Refer to MR-1.

I30-2 The commenter states that the six-story parking structure would not be attractive. As discussed in Draft EIR Section 3.4, *Project Characteristic*s (page 3-6 through 3-13), and shown on Draft EIR Exhibit 3-3, *Conceptual Site Plan*, the parking structure would be located in the center of the project site and surrounded by the residential complex, blocking direct line of sight of the parking structure from adjacent uses and roadways. Additionally, the Specific Plan provides design guidelines for the parking structure requiring it to be properly screened with landscaping and for the design of the parking garage façade to be compatible with the residential character of the Specific Plan area.

The commenter also hopes the City will develop and expand public transit in the area and put a ban on using the proposed units for short-term rental. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Karen Ezell <ezhome@cox.net>
**Sent:** Friday, March 3, 2023 8:48:58 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** The massive Victoria Blvd Apts

Hi Belinda,

Please pass my comment to the EIR.

To whom it may concern,

What are you thinking??? I know you are NOT thinking of the neighborhood and the impact such a massive apartment structure will bring.

When I first heard of the plan to have apartments in that space, I pictured a small quaint nice little quiet area. NOT this monstrosity!!!

This will bring so many people into a small quiet area of town. The child care on the corner will be most impacted with the loss of parking. We all know that the residents will have overflow of cars onto the street. Our community does not need this HUGE development. I31-1

This structure does not fit into our small community.

Please vote no on this plan. Bring the size down to half or more.

Thank you,

Karen Ezell
34466 Calle Portola
Capistrano Beach, CA 92624
(949) 378-6929

## I31. RESPONSES TO COMMENTS FROM KAREN EZELL, MARCH 3, 2023

I31-1 The commenter generally opposes the project and raises concerns regarding parking and overall scale and density of the proposed development. Refer to MR-4 regarding parking and response to Comment I27-1 regarding a reduced density alternative considered as part of the Draft EIR. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** danapointbeach@aol.com <danapointbeach@aol.com>
**Sent:** Friday, March 3, 2023 12:51:34 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** Danapoitbeach@aol.com <Danapoitbeach@aol.com>
**Subject:** Important reason for denial of this Dana Village Plan Part 1

Hi Belinda,

First and foremost Belinda there is the issue of the school that is in session at Capo Beach Church. From pre-schoolers on up the kids use that back area outside as their playground and for special events. There will need to be some vetting so as not to have any sexual offenders living near there. I hope you have looked at those apartments across from Capo Church that are Section 8 housing. I used to work for OC Mental Health and placed people in the housing. Section 8 housing vouchers along with Shelter Plus Care clients are a far cry from 3,000-5400 that the Toll Bros. are wanting. Their Reps told me at the Coffee Chat that they are catering to "empty nesters or people who are wanting to downsize. Very different from the housing already there. Then there is the issue of parking which is already horrible since I have to circle around many times to find a place to park now. Not only do hundreds of people attend the services at all times including the evening mid-week service but the many groups that are ongoing at different times day and night. The middle schoolers as well as the High School groups uses that area as well as the staff for parking. I32-1 I32-2

A NEED FOR A VISION

There is a very interesting article today in the San Clemente Times. The article talks about how Ole Hanson, the town founder had a vision. " To build a beautiful city o the ocean" where architecture will be of one type "A Spanish Village by the Sea" The historical society became a champion to preserve that identity. We can still have an eclectic vision by incorporating a look with bungalows and Craftsman styles along with incorporating stories there that define the heart and soul of the community. I urge you to incorporate a vision for such a special area that we will never be able to replace and not some build-up buildings that look like they belong across from Anaheim stadium or belong in the city of Irvine. I32-3

Regards,

Cheryl Ann Wing

From: Cheryle Wing <danapointbeach@aol.com>
Sent: Friday, March 3, 2023 1:16 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Cc: danapointbeach@aol.com
Subject: Reasons for denial Doheny Village Plan

Hi Belinda,
First and foremost Belinda there is the fact that Capo Beach Church is also a school from pre-school on up. The kids use that back area outside as their playground and for special events. I hope the issue of vetting sexual offenders is addressed. I hope you have looked at the apartments across from Capo Church. Those apartments are Section 8 housing and Shelter Plus Care clients a very different rent scale from the 3,000-5400 for the Toll Bros. Plan. I met the Reps at the Coffee Chat for Toll Bros. I was told they are catering to empty nesters or people who are wanting to downsize from their homes. I attend Capo church. Hundreds of people attend services there day and evening g services and groups. I have to circle many times to even find parking now. Also, the teachers and staff need parking too. The middle-schoolers as well as the High Schoolers have programming there and need parking. I32-4

A Need For A Vision

There is an interesting article today in the San Clemente Times. The article talks about how Ole Hanson, the town founder, had a vision. “To build a beautiful City at the Ocean” where architecture will be of one type “ A Spanish Village by the Sea.” The Historical Society became a champion to preserve the identity of the town. We can still have an “eclectic” look by incorporating a design with bungalows and craftsman styles along with incorporating “stories” there that define the heart and soul of the community. I urge you to incorporate a vision for such a special and unique area that we will never be able to replace again. Not some building that looks like it belongs across from Anaheim stadium or in the city of Irvine.
Best Wishes,
Cheryl Ann Wing RN

## I32. RESPONSES TO COMMENTS FROM CHERYL ANN WING, MARCH 3, 2023

I32-1 The commenter is concerned about the future residents of the proposed project and their interaction with children at Capo Beach Church. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I32-2 The commenter is concerned about adequate parking for the proposed development; refer to MR-4.

I32-3 The commenter encourages constructing future development with a vision in mind, not development similar to other jurisdictions in Anaheim or Irvine. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I32-4 A second letter from the commenter was submitted to the City with the same comments raised in the previous letter. Refer to responses to Comments I32-1 through I32-3.

**From:** Olivia <olivia.conkle@gmail.com>
**Sent:** Friday, March 3, 2023 10:28:02 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** For EIR re: Victoria Blvd. Specific Plan

Good morning, Belinda!

I have attached a screenshot of a post from the nextdoor app that I put up last night regarding the planned project on Victoria Blvd. My family, my neighbors, my friends in and on the outskirts of town are fundamentally against the current plan going forward. We don't like it, plain and simple. It isn't good for representing what Capo Beach has always been and a far cry from what it's (longtimers, newbies and aquatinted) people and fellow lovers of this special place would like to see for it's future.

This is a bad idea all the way around. There truly is no benefit to voters and it is not what should be grown in that spot. Yes, I said grown... Because that's what needs to happen it a place like this. You can't just roll out pop up mega centers, high-rises and a slew of corporate chains and expect locals to support it with our pocketbooks, so don't expect it with our votes either. Integrate big change slowly, if you must... don't dunk us in an ice bath and for crying out loud plan for the foreseeable horrific traffic! Install a monorail , go underground, adding an extra lane or offramp will not be enough. Drastically strengthen our infrastructure before adding to the burden. I don't think anyone is against change or creating affordable housing, but don't mistake our laid back culture for weakness or ignorance. Capo Beach is neither. I33-1

There is also a link I will be attaching for you to view comments on this post as well as the original. Please share these sentiments with our lovely council, board, developers, etc. And let them know we shall not go gentle into that good night.

I appreciate your time and efforts on this matter and trust delivery of this message and others like it will be distributed appropriately. Thank you.

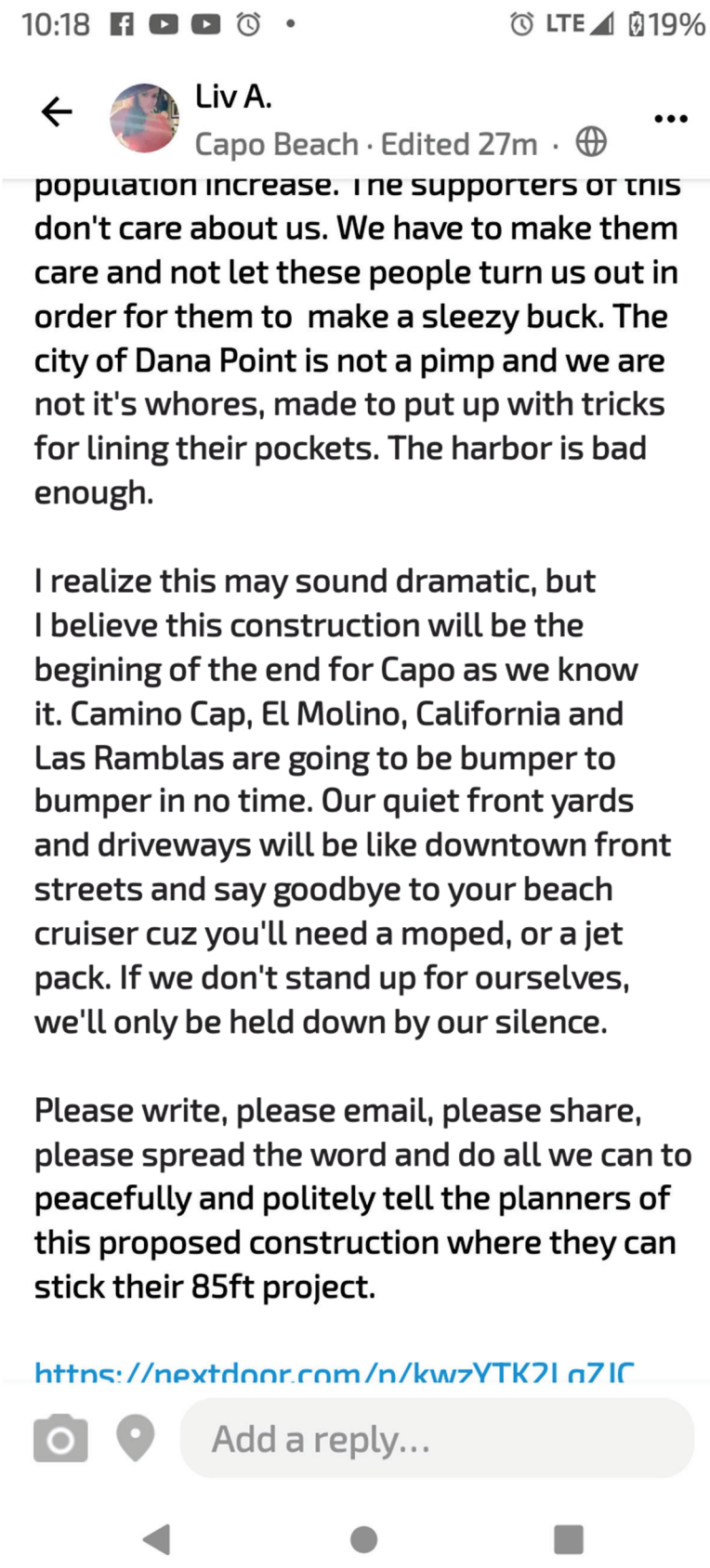
All the best,

Liv

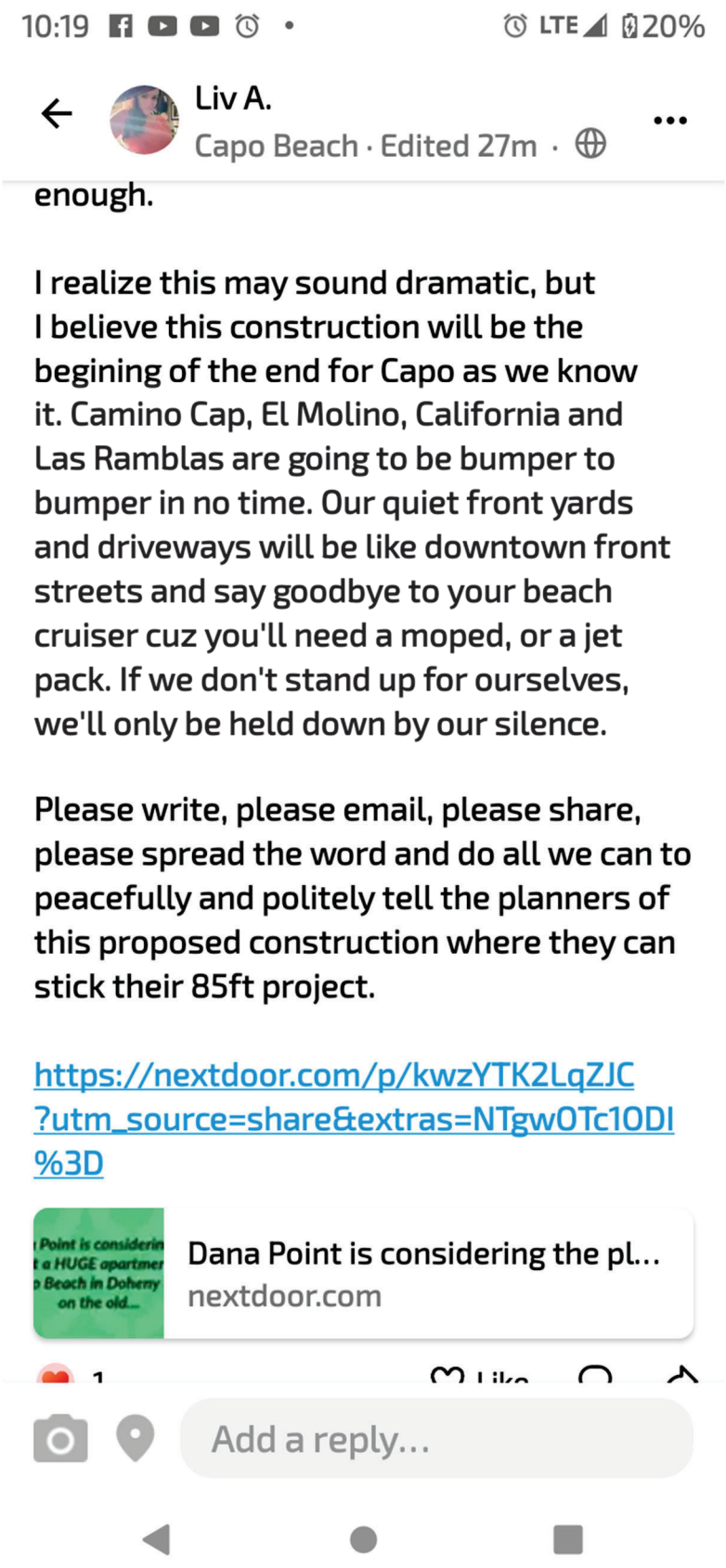
From my neighborhood:
https://nextdoor.com/p/RWMtDrpbNdMX?utm_source=share&extras=NTgwOTc1ODI%3D


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Capo Beach · Edited 27m ·
Sharing this because it's VERY IMPORTANT people!
To the People of Capo Beach: We have not pushed back against conformity and held onto our independence (no matter how incorporated) to give in now to a plan with inner-city written all over it. Through the decades, we've protected our magical little pockets of one way streets with no street lights, lined with houses that range from quaint to quirky, overdone to understated, each one echoing generations of traditions, memories, laughter, tears .... Everything that makes us wonderfully human and everything that makes us uniquely Capo Beach. There's not many places left like this and it's disheartening to know that soon, it may be lost. We must insist that our community be treated with respect. Our streets, our schools, our transit, our hospitals (lack thereof), our crime rate and our peace of mind must be spoken up for. We do not have the capacity (nor do we really want to make room?!) for this structure or any other funnel for rapid population increase. The supporters of this
Add a reply...

I33-1
cont'd


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Capo Beach · Edited 27m ·
population increase. The supporters of this don't care about us. We have to make them care and not let these people turn us out in order for them to make a sleezy buck. The city of Dana Point is not a pimp and we are not it's whores, made to put up with tricks for lining their pockets. The harbor is bad enough.
I realize this may sound dramatic, but I believe this construction will be the begining of the end for Capo as we know it. Camino Cap, El Molino, California and Las Ramblas are going to be bumper to bumper in no time. Our quiet front yards and driveways will be like downtown front streets and say goodbye to your beach cruiser cuz you'll need a moped, or a jet pack. If we don't stand up for ourselves, we'll only be held down by our silence.
Please write, please email, please share, please spread the word and do all we can to peacefully and politely tell the planners of this proposed construction where they can stick their 85ft project.
https://nextdoor.com/p/kwzYTK2Lq7IC
Add a reply...

I33-1
cont'd


10:19
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Capo Beach · Edited 27m ·
enough.
I realize this may sound dramatic, but I believe this construction will be the begining of the end for Capo as we know it. Camino Cap, El Molino, California and Las Ramblas are going to be bumper to bumper in no time. Our quiet front yards and driveways will be like downtown front streets and say goodbye to your beach cruiser cuz you'll need a moped, or a jet pack. If we don't stand up for ourselves, we'll only be held down by our silence.
Please write, please email, please share, please spread the word and do all we can to peacefully and politely tell the planners of this proposed construction where they can stick their 85ft project.
https://nextdoor.com/p/kwzYTK2LqZJC?utm_source=share&extras=NTgw0Tc10DI%3D
Dana Point is considering the pl...
nextdoor.com
Like
Add a reply...

I33-1
cont'd

## I33. RESPONSES TO COMMENTS FROM OLIVIA CONKLE, MARCH 3, 2023

I33-1 The commenter generally opposes the project and raises concerns on how it will benefit the general public and City. This comment is acknowledged. Additionally, the commenter raises concerns about the increased burden on built infrastructure and future traffic congestion; refer to MR-2. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Mary Vidrine <mary.vidrine@gmail.com>
**Sent:** Friday, March 3, 2023 10:02 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Am Very Unhappy! First Impressions Matter!

Just heard that the new apartment complex proposed to go in where the Capo Beach school bus location is now is going to be HUGESS at 85 feet tall! I34-1

This is a terrible plan as that route is what visitors to Dana Point first see as they enter our beachy resort town. How unnatural, how unattractive and what a bad image to first see. We rely upon travelers coming into Dana Point and staying at our resorts/motels for our income.

Just as unattractive as those who already allowed BevMo to be the first thing you see as you travel south on PCH from there saying "alcohol". As opposed to say, Hobies if they were there instead which says to visitors: "healthy beachtown"! I34-2

Let's CHANGE THIS plan. Comply to the Dana Point height tolerance.

Thank you,
Mary Vidrine, 23 year homeowner
33952 Alcazar Dr
Dana Point, CA 92629

Mary Lee Ecker Vidrine
NMLS No 1332862

## I34. RESPONSES TO COMMENTS FROM MARY VIDRINE, MARCH 3, 2023

I34-1 The commenter raises concern regarding the height of the proposed project and its impact on the aesthetics of the local community; refer to MR-6.

I34-2 The commenter is concerned about the buildings around Pacific Coast Highway and their impact on tourism. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Jill Richardson <jilllivinglarge@gmail.com>
Sent: Friday, March 3, 2023 1:38 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Specific Plan - comments from Jill Richardson

Hello,
Here are my comments regarding the Victoria Boulevard Specific Plan that I would like all decision-makers to be aware of.

• This plan IS WRONG FOR THAT AREA. I35-1

• The plan is NOT in line with the city's objectives. There is already WAY TOO MUCH DEVELOPMENT happening right now in Dana Point.
( New development happening right now, harbor, downtown plan, new lumber yard, slat plant…ENOUGH!!) Adding a 349-unit apartment complex will destroy the vibe, historical value, and uniqueness that the area holds. I35-2

• The plan would NOT contribute and provides benefits to the surrounding neighborhood and community. This plan is ugly. There is nothing special in design or environmental considerations. Adding a 349-unit apartment complex will create more traffic, more pollution, more erosion to the environment, and more of the same type of buildings that look dull and boring. I35-3

• The Victoria Boulevard Specific Plan proposes an increase in the maximum density of the lot from 30 dwelling units per acre to 63.3 dwelling units per acre and asks for a maximum of 349 units as opposed to 132 dwelling units WILL DESTROY this area. And provide NO SOLUTIONS TO AFFORDABLE HOUSING for residents. I35-4

• The environmental impacts of all the current development need to be determined before any more massive development happens. I35-5

Please kindly respond back that you received my email.

Thank You,
Jill Richardson
(949) 633-5806

## I35. RESPONSES TO COMMENTS FROM JILL RICHARDSON, MARCH 3, 2023

I35-1 The commenter opposes the construction of the proposed project at the site location. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I35-2 The commenter claims that the proposed project is not in line with the City's objectives and that there is currently too much development occurring in Dana Point. As discussed in Draft EIR Section 3.6, *Goals and Objectives* (page 3-22), the project would increase the supply and diversity of housing types in the City of Dana Point, consistent with the goals and policies of the Housing Element; implement infill development on underutilized parcels, consistent with the General Plan and Housing Element; and promote the character and surf heritage of Doheny Village. Additionally, Draft EIR Table 5.1-1, *General Plan Consistency Analysis* (page 5.1-9 through 5.1-24) evaluates the proposed project's consistency with applicable General Plan policies. As analyzed, the project would be consistent with the General Plan. Also, as discussed in Draft EIR Section 5.3, *Tribal and Cultural Resources* (page 5.3-17 through 5.3-18), the project site and vicinity are not considered historical resources for the purpose of CEQA.

I35-3 The commenter raises concerns regarding project-generated traffic, pollution, erosion, and aesthetic impacts. The Draft EIR evaluates project impacts with regards to traffic, air pollution, soil erosion, and aesthetics in Section 5.7, *Transportation*, Section 5.8, *Air Quality*, Section 5.4, *Geology and Soils*, and Section 5.2, *Aesthetics/Light and Glare*. As analyzed in these sections, the project would result in less than significant impacts for these resource areas after compliance with existing regulations and/or recommended mitigation measures. Refer also to MR-2 regarding traffic congestion.

I35-4 The commenter claims that the proposed density would destroy the community and provide no solutions for affordable housing. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I35-5 The commenter states that the environmental impacts of all current development within the City needs to be determined before any more development occurs. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the

Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** richard morgan <rgmretail@gmail.com>
**Sent:** Friday, March 3, 2023 1:51 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria blvd - Toll Bros apt project

Belinda,

I spoke monday at the community meeting

comments

1. 660 parking spaces x 2 times per day = 1300 plus trips daily on Victoria and Doheny park intersection- too much traffic and camino capistrano is already overburdened due to residents from the MHP parking on the street- only single lane I36-1
2. buildings way too large - overpowers the surrounding neighborhood mostly one and two story - DP dont want to be like Irvine or Lag Niguel apt density I36-2
3. mandate more affordable housing at the project- we dont need $3300 month studio apts here I36-3
4. max 3 story should be allowed like on PCH projects I36-4
5. 200 units max would be appropriate for the area I36-5
6. The proposed park will be used for resident dogs to pee I36-6

please add these to the public comments reports

Thanks,

Rick Morgan

RGM Retail
Shopping Centers and Retail Properties
(949) 350-3327
rgmretail@gmail.com

## I36. RESPONSES TO COMMENTS FROM RICHARD MORGAN, MARCH 3, 2023

I36-1 The commenter raises concerns regarding traffic congestion caused by the proposed development. As detailed in Draft EIR Section 5.7, *Transportation* (page 5.7-10), the project would generate 2,518 average daily trips (ADT). Thus, the commenter incorrectly concludes ADT values generated by the project. Refer also to MR-2 regarding traffic congestion.

I36-2 The commenter states that the proposed buildings are too large and overpower the surrounding neighborhood of mostly one- and two-story buildings. Refer to MR-6.

I36-3 The commenter requests that more affordable units be mandated by the City. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I36-4 The commenter states that a maximum building height of three stories should be allowed for the project. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I36-5 The commenter states that a maximum of 200 units would be appropriate for the project site. This comment is acknowledged. Please note that a lower density alternative is discussed in the Draft EIR as part of the mandated alternatives analysis in Draft EIR Section 7.0, *Alternatives to the Proposed Project*. The Draft EIR concludes that alternative – designated the "Village Commercial/Residential (VC/R) Zoning District Development" alternative -- would achieve the project's basic objectives, although not to the extent of the proposed project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I36-6 The commenter claims that the proposed park would be used by future residents as a dog relief area. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Sandy Szemenyei <sandy.szemenyei@gmail.com>
**Sent:** Friday, March 3, 2023 2:09 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** building height limitations

Hello Belinda

I am curious what information you can provide me with regarding the height limitations in Dana Point for the new project proposed for Doheny Village on Victoria and Sepulveda.

I have lived in Capo Beach since the 70's and perhaps I misunderstood the regulations but I was under the impression there was a height limit, and the number of units per acre for new buildings. I37-1

This new project will affect our neighborhood in various ways.. not all negative but having said that it is disturbing to most of our neighbors that there will be a massive complex right down the street.

Explain please how they can possibly get approval for this 5 or 6 story building complex. As well as how the city thinks we can provide all the necessary water, sewage etc. I37-2

The traffic alone will be a major issue in this small community.

Every neighbor I have spoken to recently is concerned.

Sandy Szemenyei
(949) 233-5617

## I37. RESPONSES TO COMMENTS FROM SANDY SZEMENYEI, MARCH 3, 2023

I37-1 The commenter requests information from City staff regarding existing height limits and density limits in Dana Point. The project site is zoned "Community Facilities" (CF) and "Recreation" (REC) (Draft EIR page 3-1). The permitted maximum height for the CF zone is 31 to 35 feet in height (three stories). The CF zone also allows multifamily housing at a density of twenty-two (22) units per acre to permit high density residential projects in compliance with the adopted Housing Element. Refer to MR-6.

I37-2 The commenter is concerned the proposed development would adversely impact existing water and sewer services and lead to increased traffic congestion. Refer to MR-7 regarding water services and to MR-2 regarding traffic congestion.

With regards to sewer services, Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (page 5.13-37 through 5.13-39), analyzes project impacts on wastewater services. The project would install appropriate connections to the existing sewer infrastructure. The Applicant, developer, and/or owner of the project would be required to pay its fair share of all applicable impact fees. As such, impacts to wastewater services were determined to be less than significant.

**From:** Cayleigh Robinson <cayleighr@hotmail.com>
**Sent:** Saturday, March 4, 2023 8:13 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Capo beach housing apt on Victoria

Hello there,

My name is Cayleigh. I am a tenant who lives on Victoria Blvd. I would like to express my concerns with the plan to build apartment buildings where the Capo school district parking lot is. I38-1
First, the tearing down and building of such a big housing complex is going to be very noisy and cause traffic on the already busy street of Victoria.
Second, how is it okay to build 85 feet tall apartment buildings when the surrounding apartments are 40 feet tall? I38-2
Third there is no parking to accommodate such a big apartment complex. The surrounding streets are already jam packed. I struggle to find parking most nights. I38-3
This is going to cause horrendous traffic and starting price of $3300 is not affordable.
This plan needs to be stopped. Keep my neighborhood quiet and not full of traffic. I38-4

## I38. RESPONSES TO COMMENTS FROM CAYLEIGH ROBINSON, MARCH 4, 2023

I38-1 The commenter is concerned about construction noise and traffic impacts of the proposed development. Construction noise impacts are analyzed in Draft EIR Section 5.11, *Noise* (page 5.11-17 through 5.11-20). As discussed, project construction noise would be exempt from the City's interior and exterior noise standards provided that construction would occur only during the City's allowable construction hours and is considered a typical part of urban life. In order to reduce construction noise levels during project construction, the project would implement the City's standard condition of approval in regard to construction noise, which requires all construction equipment to be equipped with properly operating and maintained mufflers (which would result in a sound reduction of 5 dBA), the use of temporary walls or noise barriers at the discretion of the Director of Public Works to block and deflect noise (which would result in a sound reduction of up to 20 dBA), locate stationary construction equipment so that emitted noise is directed away from the nearest noise sensitive receptors, locate equipment staging in areas furthest away from sensitive receptors, and limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday). Project compliance with this standard condition of approval would further reduce temporary construction noise, and short-term construction noise impacts would be considered less than significant in this regard.

Construction traffic impacts are analyzed in Draft EIR Section 5.7, *Transportation* (page 5.7-12 through 5.7-1). As analyzed, construction-related trips associated with trucks and employees traveling to and from the site in the morning and afternoon may result in some minor temporary and short-term traffic impacts to vehicles traveling along Victoria Boulevard and/or Sepulveda Avenue. However, in accordance with Municipal Code Section 11.10.014, *Special Provisions*, construction noise is prohibited between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, and/or any time on Sunday or a Federal holiday. Compliance with Municipal Code Section 11.10.014 would ensure truck hauling activities would not occur during the nighttime hours and no nighttime noise impacts would result in this regard. Further, Mitigation Measure TRA-1 would require a Construction Management Plan, which would minimize potential impacts to emergency access on the local circulation system. Overall, construction-related traffic impacts would be short-term and temporary and implementation of Mitigation Measure TRA-1 would ensure construction-related project impacts are less than significant.

I38-2 The commenter questions why the proposed development is 85 feet in height when the surrounding apartments are 40 feet tall; refer to MR-6.

I38-3 The commenter is concerned about the adequacy of off-street parking for the proposed development and anticipated traffic congestion. The proposed project includes a parking structure in the center of the project site surrounded by the residential units. The number of spaces has been calculated to meet the parking needs of the residents and guests. It is anticipated that residents and their guests would park on-site in the structure and not on the streets. Refer to MR-4 regarding parking and MR-2 regarding traffic.

I38-4 The commenter states that a starting monthly rental price of $3,300 is not considered affordable. This comment is acknowledged. Note, the affordable units would be priced differently than the other market-rate units. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** mickey munoz <mickey@mickeymunoz.com>
**Sent:** Saturday, March 4, 2023 9:22:24 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Apartments

"It's for the children"!

Yes, the children are the "stake holders", they will inherit our decisions.

Crowd more people in rental apartments where there won't be the pride of ownership, could lead to potential crime and pandemic conditions. For us current citizens, it will lead to more traffic, longer lines, higher prices, and enduring two to three years of construction chaos.
Worst yet, will be the violation of the natural environment.

We are asked to conserve water, natural gas, electrical and drive less. Is it smart to add more people?

I surf down stream from the sewer plant at Doheny State Park, at times it's over taxed, that's human shit we smell and surf in. Will the developer pay to have it improved to handle more people?

We have had to make two 911 calls in the last year. The first, some guy is trying to beat in our front door screaming profanity at 10:00 at night. My wife mad three calls, I made one. The operator could hear the banging and swearing, it took the police over 45 minutes to get to us. The second time we had to call 911, was a couple of months ago. Some guy is out by our cars tearing his cloths off, screaming profanity, and throwing rocks, it was an hour before the police arrived. Dana Point can't even protect the citizens they already have, much less add more!

Yes, "it's for the children" this is what they would inherit!

I39-1

If it's, as it usually is about the money! How about continuing to use that land as is, a storage and a maintenance yard for the School district. Turn the extra space into a boat, rv, car, storage yard, something that is needed and would serve the existing community. Maybe a trade school for the "children" where they could learn real world much needed skills so they can make enough "money" to actually be able to afford to live in the community where they were raised.

Again if it's about the money, we would be happy to pay more in city taxes, a school bond, or what ever, to not have this blight on our community.

If it really is for the children, give them places to BREATH. Don't pack in more people, build them more parks. Skate board parks, soccer fields, gardens and trees. Dana Point should have a municipal pool, we need a dog park, not more people!

The "children" should not have to surf in human shit!

Thanks the chance to voice our opinion.

Mickey and Peggy Munoz

We own our home and have lived in it for the past 38 years, we are obviously against this project that would be a adverse detremental impact on our community.

## I39. RESPONSES TO COMMENTS FROM MICKEY MUNOZ, MARCH 4, 2023

I39-1 The commenter opposes the project and has general concerns regarding introducing more rental apartments in the City that can lead to more crime. As concluded in Draft EIR Impact Statement PSRU-2 (pages 5.13-32 through 5.13-33), the proposed project is not anticipated to involve significant impacts to police protection services, as the project would not induce substantial population growth. Further, the proposed project would conform with the applicable laws, ordinances, and regulations in place for police protection services including the Municipal Code Chapter 8.02 (adopts by reference the 2019 CBC). The commenter states that the site should be redeveloped into other uses than multifamily residences. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Diane Tosetti <dianetosetti@icloud.com>
**Sent:** Saturday, March 4, 2023 10:54:45 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Plan

Hello Belinda and the P.C.,
As a resident near the proposed development I am intimately familiar with the area and want to strenuously object to the plan as proposed.

1. Water consumption, given all the stress in our current resources and no plan to increase water storage and availability, adding an additional 499 rooms placed undue burden. I40-1

2. Traffic management, the area does not have adequate ingress/egress to support an additional 500+ cars on a daily basis, let alone beach traffic. I40-2

3. Building height, why would the commission approve a double the height of current and recently completed construction, with an average of 35'? Allowing any structure to reach a height of the 85' proposed will change the beach town feel and landscape of the entire area. It also sets a precedent for future construction projects. I40-3

4. Land use, I agree the land could be put to better use and additional monies to the city, the proposed revenues are projected to be far less than the $40M promised to the community. I40-4

I'm sure the city and developers can come up with a much scaled down project that follows current guidance, supporting urban growth whilst limiting environmental, residential and aesthetic impact.

Thank you,

**Diane Tosetti**
33691 Via Cascada

## I40. RESPONSES TO COMMENTS FROM DIANE TOSETTI, MARCH 4, 2023

I40-1 The commenter generally opposes the project and is concerned about water demand associated with the development; refer to MR-7. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I40-2 The commenter states that the project area does not have adequate ingress and egress to support the project in addition to existing beach traffic. Project-related site access was analyzed in Draft EIR Section 5.7, *Transportation* (page 5.7-12 through 5.7-15). A 42-foot-wide full access driveway on Sepulveda Avenue (Sepulveda Avenue Driveway) and a gated full access driveway on Victoria Boulevard (Victoria Boulevard Driveway) would serve as the primary vehicular access to the project site. Additionally, a third driveway would be located at the southern end of Sepulveda Avenue and would only be used as emergency access and enforced through the use of bollards and/or similar devices (i.e., knox key boxes). The City would review all proposed site access points to confirm compliance with all applicable safety standards and considerations concerning the proposed access configurations. Additionally, the project would comply with all site access requirements for residential developments detailed in the Municipal Code Chapter 9.35, *Access, Parking and Loading*, including the required curb-to-curb roadway width for access on streets from parking facilities and spacing standard for driveways of residential developments. Lastly, site plans of the project would also be reviewed by OCFA for review to ensure that inadequate design features or incompatible uses, for the purpose of emergency access, do not occur.

I40-3 The commenter is concerned that the proposed building height would change the beach town feel and landscape of the project area, and also set a precedent for future construction projects; refer to MR-6. Note, future construction projects that exceed existing building height limits would require separate environmental review under CEQA and the City's planning process on a project-by-project basis. Approval of the proposed project would not set a precedent for future projects to have higher building heights, as the proposed Specific Plan regulations would only apply to the project site.

I40-4 The commenter claims that the existing site can be put to better use and claims that the revenues proposed from the project are projected at far less than $40 million. It should be noted that the forecasted $40 million in revenues for the rehabilitation of Dana Hills High School was based on the issuances of 30-year Certificates of Participation (COPs). This approach would allow for the receipt of a lump sum of money secured by the lease revenues. Although, the final lease revenues will be dependent on the actual entitlements received, a preliminary estimate based on the minimum base rent amount under the lease is that approximately $40 million would be received.

This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I40-5 The commenter concludes that the City and developer can come up with a scaled down version of the project that limits environmental, residential, and aesthetic impacts; refer to MR-5.

**From:** Mary Murphy <henreee007@aol.com>
**Sent:** Saturday, March 4, 2023 7:48:52 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Mary Murphy

I strongly object to the proposed 85 foot high apartments in Dana Point. This city continues to spoil the community with overbuilding and expansion that impacts the city residents lives. I41-1

Do not pass this and build!!!

Mary Murphy

## I41. RESPONSES TO COMMENTS FROM MARY MURPHY, MARCH 4, 2023.

I41-1 The commenter opposes the project and over-development within Dana Point. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Alise Bowman <alisebowman@gmail.com>
**Sent:** Sunday, March 5, 2023 8:04 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** *NO* to Victoria Apt Project!

Hello Belinda,

For the Victoria Apartment Project to even be considered is sickening. This MASSIVE apartment monstrosity does not fit our beach community in the slightest sense. Not only will it be an absolute mess to traffic, but the the pure size of the complex is disgusting. Capo Beach is a small beach community that already gets treated like the red-headed step child to Dana Point. Please explain to how this project fits Capo Beach?! For once, can the tax paying citizens be considered over capital greed and money? This would change the WHOLE vibe and energy of Capo Beach. I'm sickened that this project is even being considered. Do better by the residents you are supposed to represent and whom pay your salary. I42-1

NO to the VICTORIA APT PROJECT!!!!

DON'T RUIN OUR TOWN!

**Alise Bowman, CPA, MSA**
alisebowman@gmail.com

## I42. RESPONSES TO COMMENTS FROM ALISE BOWMAN, MARCH 5, 2023.

I42-1 The commenter opposes the size of the proposed project and cites concerns regarding the project's impacts relative to traffic; refer to MR-2 regarding traffic and MR-6 regarding land use compatibility. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Chris Orsburn <chrisorsburn@hotmail.com>
Sent: Sunday, March 5, 2023 8:47 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: RE: Victoria Blvd Apartments

Hi Belinda,

My family moved to Capistrano Beach in 1948. I grew up in this quaint, little town and loved every minute of it. Now, they are trying to change Capistrano Beach into a town we will never recognize again. The proposed apartment complex on Victoria Blvd, which is a monstrosity, does not belong in Capistrano Beach. It's horrible!

All around that area are mostly single family homes. The people living in these homes will be greatly affected by this huge apartment building. That area should be preserved. Maybe adding some picnic tables, or a skate park or a beautiful green area for people to enjoy would be a much better use for that land. It would benefit all of those people living close by and everyone in Capistrano Beach. I43-1

Building these awful apartments will remove what is left of the place where many of us went to grammar school (Serra Elementary). It will be an eye sore and it will cause more traffic problems. Why does Dana Point (I still prefer to call the old school area Capistrano Beach) make so many bad changes? Don't the people in charge care about anything else but money? Don't they see they are taking away the history, the old historical buildings, the places that we want to keep? I43-2

My parents, Nofie and Alice Famularo ran the water company for Capistrano Beach and Dana Point for many years. They would both be so angry and disappointed to see what is happening to their town. I hope you will do what you can to stop this monstrosity from being built.

By the way, I understand Dana Point is also trying to build more apartments near Costco. Will these massive, horrible projects never end? Already, Dana Point has changed and has been overrun with apartments. Why don't the people in charge stand up to our governor and say they will not build more apartments? Governor Newsom has no idea or he doesn't care what all these apartment buildings do to our towns/cities. Please do what you can to stop these projects. Please keep the old buildings and keep Capistrano Beach the way it should be. I43-3

Christine (Famularo) Orsburn
760/420-7900

Sent from my iPad

## I43. RESPONSES TO COMMENTS FROM CHRISTINE ORSBURN, MARCH 5, 2023.

I43-1 The commenter opposes the size of the proposed project and recommends alternatives to site development. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I43-2 The commenter cites concerns regarding the project's impacts relative to land use compatibility, aesthetics, traffic, and historical buildings. Refer to MR-6 regarding land use compatibility and aesthetics and to MR-2 regarding traffic.

With regards to historical resources, the Draft EIR analyzed the proposed project's potential impacts to historic resources (including buildings) and concludes that the project would have no impact to historic resources. As explained in Draft EIR Section 5.3, *Tribal and Cultural Resources* (Impact Statement CUL-1, page 5.3-17 and 5.3-18), sixteen previously recorded historical resources are located within a 0.25-mile radius of the project area. However, none are located within the project site. The project site includes six buildings. Of these buildings, the Butler Building and the Storage Shed are less than 50 years old and have not reached the age of eligibility for listing. The other buildings on-site, the Grounds Dispatch Building (1968), Tire Storage Building (circa 1952-1967), Mechanic Shop (circa 1952-1967), and the Transportation Office (former Serra School) (circa 1952-1967) are not recommended eligible under CRHR Criterion 3 for their architecture. The Grounds Dispatch Building is a prefabricated building, simple in design, and does not reflect any architectural style. Similarly, the Tire Storage Building and Mechanic Shop were born out of utilitarian needs of the school district. The buildings are simple and not architecturally designed, do not reflect distinctive characteristics of a type, period, or method of construction, and do not possess high artistic value. The Transportation Office, though containing some elements typical of mid-century modern design (e.g., the saw tooth roof, band windows, breezeway, and sloping rooflines) is not a distinctive example of the style meriting designation. It is also not the work of a master given that research did not reveal an associated architect with the Transportation Office. As such, none of the buildings are eligible for listing in the National Register of Historic Places (NRHP) under Criterion C or California Register or Historic Resources (CRHR) under Criterion 3.

This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the

Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I43-3 The commenter opposes the project and asks the City of retain the existing historic buildings in the project area. Refer to response to comment I43-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Kathryn Brooks <uciretired@gmail.com>
Sent: Sunday, March 5, 2023 9:36 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Cc: Mike Frost <MFrost@DanaPoint.org>
Subject: Victoria Blvd Apartment Project

Dear Belinda,
I met you over 2 years ago. You had just taken over the proposed project of 4 single family homes on Via Verde. There were meetings with the owner and the city. I attended them all with concerned neighbors. Issues were raised in that the massive structures were not in keeping with the character of the neighborhood. The partly completed project stands 2 years later with no end in sight. The stacks of shingles have been on the roofs for over 6 months. The project was a bad idea then and now remains an eyesore.

I am not against development. The term "responsible development" came up then and was disregarded by your team. Now we have the bus yard project located just down the hill from the massive, approved, uncompleted Via Verde project. Again I ask what happened to the the term "responsible development?" It appears that moving ahead with whatever can provide the biggest allowable mass is the direction of the planning commission these days. In fact, the track record shows that this the likely outcome. I44-1

Is it too late to redeem yourselves by showing some discretion as the planning commission moves ahead in the approval process? I have no other comments other than to point out once again that residents take a back seat to those decision makers who seem determined to convert existing neighborhoods into places of congestion and chaos.

Respectfully,
Kathryn Brooks
34460 Via Verde
Capistrano Beach, CA 92624

## I44. RESPONSES TO COMMENTS FROM KATHRYN BROOKS, MARCH 5, 2023.

I44-1 This comment provides some historical background information regarding the commenter's involvement in the public participation process for another housing development in the City and generally expresses opposition to the project's size. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Catherine Marra <c1861arram@gmail.com>
Sent: Sunday, March 5, 2023 10:10 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Cc: c1861arram@gmail.com
Subject: Development in Capo Beach

I do not think it's a good idea. Dana Point is being ruined along with San Juan Capistrano why ruin another neighborhood? To me it seems pure greed. That is way too high. We have a water shortage supposedly so why add to it.
I have written my opinion but don't know where it went.
I AM NOT FOR THIS AT ALL.
Catherine Marra

I45-1

## I45. RESPONSES TO COMMENTS FROM CATHERINE MARRA, MARCH 5, 2023

I45-1 The commenter generally opposes the proposed project and cites concerns regarding the water shortage; refer to MR-7. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Vicki Smith <vms808@gmail.com>
**Sent:** Sunday, March 5, 2023 10:27 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** HUGE APTS. IN CAPO BEACH

I am extremely & vehemently against this plan & the effect it will have on our community. I VOTE DO NOT BUILD THIS, EVER!!! I46-1

## I46. RESPONSES TO COMMENTS FROM VICKI SMITH, MARCH 5, 2023.

I46-1 The commenter opposes the project. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Travis Kegel <travis.scottesq@gmail.com>
**Sent:** Sunday, March 5, 2023 10:30 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Apartments - Public Review

Ms. Denies,

Thank you for the opportunity to review the subject document. The Victoria Boulevard Apartments EIR supplied for public review appears to be rushed, full of errors, and deficient in a number of key areas. This document should not be approved without modification and supply of technical appendices. There are errors and misleading information throughout the document. The most glaring items are the following:

Inconsistencies with previous authorizations and City goals:
The proposed project is inconsistent with the Doheny Village Zoning District update project and the efforts of city staff and community members over the last 10 years. The project proposes heights and usable space exceeding 75 ft, and another 10 ft for appurtenances. The zoning update clearly states that portions of buildings which exceed 35 ft should be limited to architectural elements and do not create conditions incompatible or objectionable to surrounding land uses. The proposed use of rooftop decks near 75 ft in height are objectionable to all surrounding residents, and should not be permitted. I47-1

Full and Complete Project:
Projects under CEQA, are required to evaluate the action as a whole including direct and indirect effects. The project does not evaluate its impacts as a whole, nowhere in the document is the existing use of a bus yard, storage, and maintenance area for the Capistrano Unified School District evaluated. This is an existing use that must continue to serve students of the District and the removal or relocation of these facilities should be evaluated. Since the District will still require these services and facilities, where are they going? What is the effect if any? I47-2

Water Supply and Distribution - PSRU-6:
This CEQA consideration is intended to determine if a project has enough water supply development for the foreseeable future. The section does not answer this question and instead misleads the public on the availability of water and needs of this new development. Table 5.13-8 claims to identify the net water demand onsite; instead, it provides false information inconsistent with a technical appendix and has the clear intent of side stepping the question. The document notes that GPM stands for gallons per month, this is completely false; GPM stands for gallons per minute. These numbers do not reflect the demand or supply required for the site; the technical appendix only makes the determination that existing pipeline (for the most part) would meet pressure demands for the site. Based on a 76 GPM, the development stands to require hundreds of water acres to meet demand, nearly 20 times the existing water demand. I47-3

Thank you for your consideration,

Travis Scott

## I47. RESPONSES TO COMMENTS FROM TRAVIS SCOTT, MARCH 5, 2023.

I47-1 The commenter cites concerns regarding the proposed project's inconsistencies with the existing zoning regulations, particularly regarding building heights. Refer to MR-6. In addition, as discussed in Draft EIR Section 5.1, *Land Use and Relevant Planning* (page 5.1-25), the proposed project includes adoption of the Victoria Boulevard Specific Plan and would require a Zone Change to change the zoning of the project site to "Victoria Boulevard Specific Plan (VBSP)." Thus, the proposed project would be subject to the permitted uses and development standards under the VBSP rather than those associated with the existing zoning designation of CF and REC. Therefore, as concluded in the Draft EIR, upon approval of the proposed Zone Change, the project would not conflict with zoning regulations.

I47-2 The commenter opines that the relocation of the existing bus yard, storage and maintenance area for CUSD should also be evaluated as part of the proposed project. The proposed project involves the demolition of the existing CUSD bus yard, however, the environmental analysis relative to the relocation of these existing uses is not a component of the project. As discussed in Draft EIR Section 3.3, *Project Background and History* (page 3-7), CUSD identified the project site as a surplus site and available for ground lease to interested parties. Compliance with laws regarding the disposal of surplus lands is CUSD's responsibility and thus, is not evaluated as part of the proposed project.

I47-3 The commenter cites concerns regarding water supply. The commenter opines that inaccurate water supply information has been presented in the Draft EIR and the technical appendix (Draft EIR Appendix 11.10, *Utilities Correspondence*). Refer to MR-7.

The commenter also states that the acronym "GPM" is inaccurately used, stating it should be "gallons per minute" rather than "gallons per month." The commenter is correct that the use of "GPM" in the context of hydraulic environmental analysis typically does stand for "gallons per minute," however, this is a unit of volumetric flow rates rather than a unit of water demand quantification. As discussed in Draft EIR Appendix 11.10, *Utilities Correspondence*, for the purposes of this analysis, the yearly total water demand is divided by the number of days in a year to obtain the Average Daily Demand (ADD), which is expressed in gallons per month.

**From:** Maxine Richardson <msmaxx69@gmail.com>
**Sent:** Sunday, March 5, 2023 10:49 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Proposed apartment complex Capistrano Beach.

I'm horrified at the news of this proposed complex in Capistrano Beach. How the city of Dana Point can approve such a monstrous project is beyond me. The traffic nightmare for the residents of Capistrano Beach must be addressed. Stop this now! We have no room for an estimated 750 cars a day ( low estimate) on our surface streets. Many of us believe the city of Dana Point has become corrupt. Payola is illegal and if it comes to light that this has happened I can bet there will be some law suits. I also understand the development has been given a variance for height. This will open the door for the total destruction of our beautiful city 85 ft now, 100 ft next year. We will become a mini Irvine? Stop this insanity.
Maxine Richardson Capistrano Beach resident.

I48-1

I48-2

## I48. RESPONSES TO COMMENTS FROM MAXINE RICHARDSON, MARCH 5, 2023.

I48-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic. Refer to MR-2.

I48-2 The commenter cites concerns relative to the proposed project's building height; refer to MR-6.

**From:** Jana L Hofmann <jana.jewel23@gmail.com>
**Sent:** Sunday, March 5, 2023 7:22 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:**

Hi Belinda,
Just a note to thank you for your efforts and to ask to pass on my thoughts on the Victoria Ave. Apartment project. We have owned property in Capistrano Beach for 63 years and lived here for 40. This is wonderful community. However, We are against the plan for Victoria Ave. Improvement to our community is good. I don't feel that would be an improvement. It would be a detriment. I vote NO.THANKS.

I49-1

## I49. RESPONSES TO COMMENTS FROM JANA HOFMANN, MARCH 5, 2023.

I49-1 The commenter opposes the project. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Wes Miller <wtmiller92@gmail.com>
Sent: Sunday, March 5, 2023 7:31 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Doheny Plan

Good morning Ms Deines,

I'm writing to express my concern with the proposed Doheny Village plan. I am a 31 year Capistrano Beach Resident and I am 100% against this development.

The city and surrounding communities lack the infrastructure to support a population uptick of this size.

I50-1

I understand housing is an issue but we must build responsibly within the means of what our current infrastructure can handle.

Our community doesn't even have an an emergency room hospital within 20 minutes. Let alone one that can handle a traumatic I hey, heart attack, or stroke.

I work for the county of Orange and I am letting you know that this is a bad idea and sets the wrong precedent for our small beach community.

I50-2

I understand that building is inevitable, but we must build responsibly or not at all.

Thank you for your time.

Best,

Wesley Miller

## I50. RESPONSES TO COMMENTS FROM WESLEY MILLER, MARCH 5, 2023.

I50-1 The commenter generally opposes the project and cites concerns regarding the project's impacts to the existing infrastructure. The Draft EIR analyzed the proposed project's potential utilities and service systems (infrastructure) impacts and concludes that the project would have a less than significant impact relative to utilities and service systems. As explained in Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-30 through 5.13-48), all operational impacts regarding utilities and service systems were found to be less than significant and no mitigation is required. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I50-2 The commenter reiterates their opposition to the project and cites a concern over an existing lack of emergency health services in the area. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Tyler Bowman <tyler.bowman@compass.com>
**Sent:** Sunday, March 5, 2023 8:02 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** No To Victoria Apartment Project

To Whom It May Concern,

I am writing you in reference to the proposed building project in Capo Beach. I'm writing you as a lifetime resident and a multi business owner, all located in Capo Beach.

Putting a building of this size with as many units will destroy so many things for our city. Where do you even begin? The access to Dana Points areas of attraction will be so congested. It will be devastating to our roads, and will take away the preserved feeling of our amazing town. I51-1

Why would we propose such a building? It makes absolutely no sense. Not to mention, it's a visual atrocity.

Please don't allow this to happen here. We already have so much going on. The Harbor Renovation is great. Downtown Dana Point was also a positive change. This, however, falls outside the lines of what helps our city. This can only have negative effect on how the residence feel, future residents not wanting to move here etc. I51-2

Our town can't handle this kind of capacity on such a small footprint. I ask you as a resident and a professional of this town- put the tax paying residents concerns before money. With so much doing down the drain in our state, please don't ruin our city. I51-3

All the best,

Tyler Bowman
BOWMAN LUXURY HOMES
Realtor ® | DRE #02133051
949-275-1386
Tyler.Bowman@Compass.com
Compass | DRE# 02133051
www.BowmanLuxuryHomes.com

## I51. RESPONSES TO COMMENTS FROM TYLER BOWMAN, MARCH 5, 2023.

I51-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic and density/size. Refer to MR-2 with regards to traffic and MR-5 and MR-6 with regards to project density and massing and land use compatibility. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I51-2 The commenter cites concerns regarding the proposed project's visual impacts; refer to MR-6. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I51-3 The commenter states that the community cannot handle the proposed density of the project and opposes the development. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Chuck Pillsbury <ChuckPillsburyRealtor@outlook.com>
**Sent:** Sunday, March 5, 2023 1:24 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Boulevard Specific Plan

We are residents of Capistrano Beach and we are very much opposed to this new huge construction project!!! It is too big and too high and illegal and with all of the new development in Dana Point. This is entirely unnecessary. We are losing the character of our community, and it is being transformed by the greed of developers and city personnel/elected officials. Stop!!!! Look at the bigger of how this will change our community!!! More traffic, construction delays and mess, and furthering the Big City look of our small beach community. Our community rejects this development bigtime!!!! Will we be heard? Will you listen to us? Will we have access to the voices from the community, or will they be buried? Will you notify us about the comments that have been made in response to this issue? This is an outrage when you short circuit the community at large!!! Has this been addressed in the local Dana Point weekly newspaper? We think this has been kept hidden so as to not get the feedback from the locals. I52-1 I52-2

Most seriously,

Chuck & Linda Pillsbury



Chuck Pillsbury
Real Estate Broker, MBA, Zutila, Inc.
A 4000 Barranca Pkwy. Suite 105 Irvine, CA 92604
U.S. Coast Guard Veteran
P. Property Manager
M 949.280.8346

E ChuckPillsburyRealtor@outlook.com

Bre # 00883128

## I52. RESPONSES TO COMMENTS FROM CHUCK PILLSBURY, MARCH 5, 2023.

I52-1 The commenter generally opposes the size of the proposed project. Refer to MR-6 pertaining to aesthetics and building height. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I52-2 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Hale McDaniel <drmcdaniel@hotmail.com>
Sent: Sunday, March 5, 2023 4:50 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Doheny village

I would like to let my objection known to the Doheny Village apartment plan. I53-1
This complex has way too many units. It will overcrowd schools and traffic. It is very ugly, this is a small town beach community, not a large city. The size of this development shouldn't be larger than 1/3 of this proposed plan. I don't understand why you would suggest a unit this big on a town that has 33K population. I came from Houston, which has no zoning plans and it's the ugliest city with the worst traffic. Do not turn this laid back Beach town into an ugly crowded city. I53-2
Hale McDaniel DDS

## I53. RESPONSES TO COMMENTS FROM HALE MCDANIEL, MARCH 5, 2023.

I53-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic, school services, and aesthetics. Refer to MR-2 regarding traffic. With regards to school services, the Draft EIR analyzed the proposed project's potential impacts to schools and concludes that the project would have a less than significant impact relative to schools. As explained in Draft EIR Section 5.13, *Public Services/Recreation and Utilities*, (Impact Statement PSRU-3, page 5.13-33 and 5.13-34), the project would be required to contribute its fair share of the cost of increasing demand for school facilities through payment of development impact fees. According to Section 65996 of the California Government Code, payment of statutory fees is considered full mitigation for new development projects. In addition, the Development Agreement for the project envisions providing substantial funding for reconstruction/seismic improvements at Dana Hills High School. Thus, a less than significant impact would occur in this regard. With regard to aesthetics, refer to MR-6. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I53-2 The commenter is opposed to the proposed development. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: claire <cmorrisonphd@yahoo.com>
Sent: Sunday, March 5, 2023 5:54 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Building

I strongly object to the building plan on Victoria in Capo Beach. High density will be a problem for all residents and will only benefit the developers who in all probability do not live here.

I54-1

Dr. C Morrison

## I54. RESPONSES TO COMMENTS FROM CLAIRE MORRISON, MARCH 5, 2023.

I54-1 The commenter questions why the City would consider approval to allow increased density and building height on-site. Refer to MR-5 regarding project density and MR-6 regarding building height. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Debbi Mellah <beachbennett@cox.net>
**Sent:** Sunday, March 5, 2023 7:23 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** Michael Villar <MVillar@DanaPoint.org>
**Subject:** VBSP

Hello Belinda.

Could you please forward my concerns about the VBSP?
Thank you so much!
Debbi Mellah

I have many concerns about the VBSP.
The project will require amendments to the General Plan and the Doheny Plan—why do we develop a plan if we don't follow it?
A General Plan amendment
Zone Change
Local Coastal Program amendment
Why? To allow for a 211% maximum density? A 217% maximum number of dwelling units? A 243% maximum height allowance? These are not insignificant amendments. It makes a mockery of "Dana Point's Vision" which apparently, is only on paper. I55-1

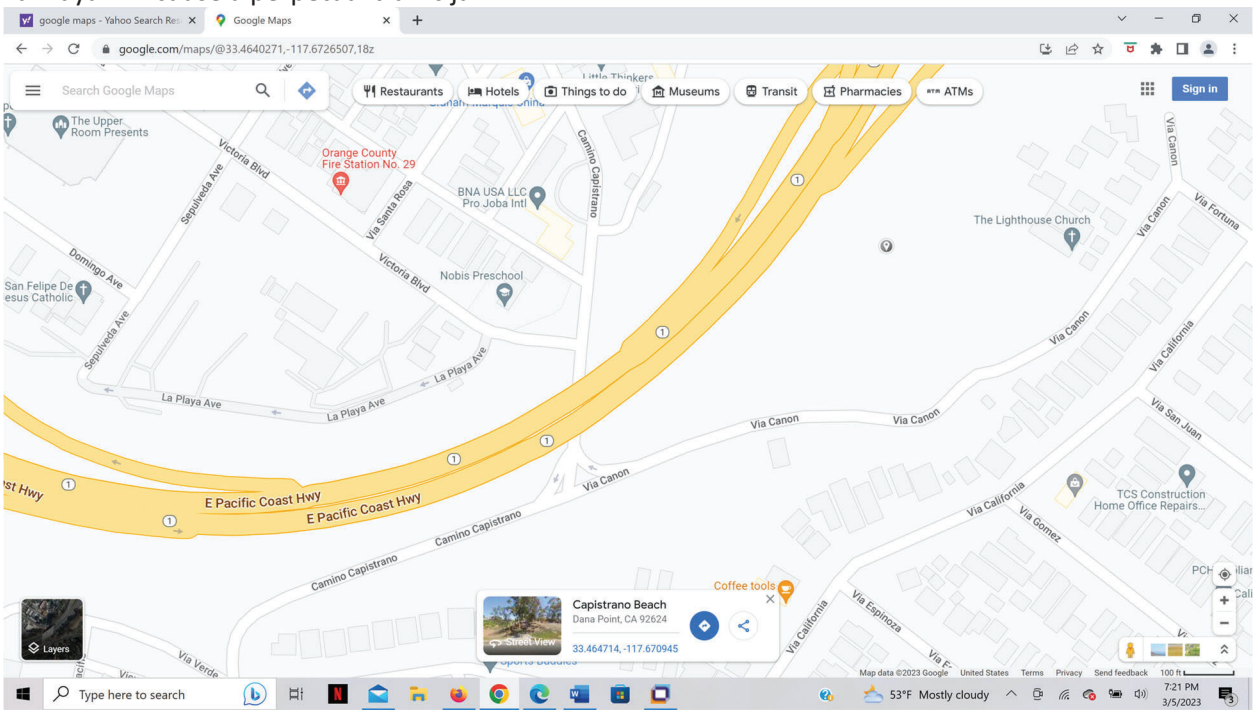
As a Public Health Nurse for the County of Orange for over 3 decades my biggest concern is public safety. Fire Station 29 is directly across the street from this enormous project on Victoria Blvd. According to the EIR, Pg 1-13 and 1-16,
TRA-4: Project implementation could result in inadequate emergency access
Refer to Mitigation Measure TRA-1
Less than significant impact with mitigation incorporated
Yet here is TRA-1
TRA-1: No mitigation measures are required
Less than significant impact I55-2

Which is it? Surely the building of 349 units, 681 parking spaces and the subsequent increase in potentially 681 cars a day in and out of the complex will definitely impact the ability of the Fire Department right across the street, to get out on the street, and to navigate the nearby streets to respond to any fire or other emergency. This seems to me to be of utmost importance, and not adequately addressed in the EIR. What a tragedy it would be if this project, during construction or when completed, slowed down our fire department's arrival time when minutes may mean life or death. A heart attack? A traffic accident? A fire? Minutes count. I cannot imagine a Planning Commission or City Council approving this project at the expense of the potential for lost lives and tragedy. But I can imagine the citizens holding the city responsible if they suffer harm and can show delayed arrival times. I55-3

Is Fire Station 29 equipped to handle all emergencies at the proposed project? Do they have all the right equipment and ladders necessary? Are they able to access all areas in case of a fire? From the drawings it appears as if many of the units would be unreachable. The intersection of La Playa and Sepulveda is marked as EVA gate, and EVA on exhibit 3-5, but the next exhibit 3-6 shows grass and trees and a path not a road from Sepulveda to the parking garage via La Playa. Is it EVA or not?

The main entrance to the complex is on Sepulveda, but the secondary entrance—La Playa--in on Victoria, close to where Camino Capistrano and Victoria come together. This seems like a hazardous place to put an entrance/exit because it will certainly impact the traffic flow with cars slowing down almost to a stop to make the 90 degree turn. Many residents in the Palisades of Capo Beach use Via Canon and Camino Capistrano to get to Doheny Village, and the potential of 681 cars going in and out of La Playa will cause a perpetual traffic jam.

l55-3
cont'd



## I55. RESPONSES TO COMMENTS FROM DEBBI MELLAH, MARCH 5, 2023.

I55-1 The commenter inquires why the City develops plans (i.e., General Plan), if it does not intend to follow such plans. Amendments to General Plans, the Zoning Code, and Local Coastal Program occur with regularity, and are appropriate to address changing goals, economies, policies, and other circumstances. One of the key judgements exercised by the City's policymakers is to determine when to follow and when to change those plans. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I55-2 The commenter has inaccurately cited the text of Mitigation Measure TRA-1 and expresses concerns regarding public safety and emergency access for the adjacent OCFA fire station. The Draft EIR analyzed the proposed project's potential safety impacts and concludes that the project would have a less than significant impact with mitigation incorporated relative to safety. Mitigation Measure TRA-1, which relates specifically to emergency access, is located in Draft EIR Section 5.7, *Transportation* (page 5.7-16 through 5.7-17), under Impact Statement TRA-3, as follows:

TRA-1 Prior to issuance of any grading and/or demolition permits, whichever occurs first, the Applicant (Developer) shall prepare a Construction Management Plan (CMP) to be submitted for review and approval by the City of Dana Point Director of Public Works. The requirement for a CMP shall be incorporated into the Project specifications and subject to verification by the Director of Public Works prior to final plan approval. The CMP shall include, at a minimum, the following measures, which shall be implemented during all construction activities as overseen by the Construction Contractor:

- Meet the standards established in the current *California Manual on Uniform Traffic Control Device* (MUTCD) as well as City of Dana Point requirements. The CMP shall be prepared by the contractor and submitted to the Director of Public Works for approval pertaining to off-site work, including sidewalk construction, building façade, underground utilities, and any work that would require temporary curb lane closures. The plan shall be developed according to the MUTCD (latest edition) guidelines, including plans for traffic signs, traffic cone arrangements, and flaggers to assist with pedestrian and traffic.
- Submit the CMP to the California Department of Transportation (Caltrans) and City of San Juan Capistrano for review and comment, prior to approval by the Director of Public Works, should construction hauling utilize facilities within these jurisdictions.

- Identify traffic control for any street closure, detour, or other disruption to traffic circulation, including the necessary traffic controls to allow for construction-related traffic to enter and exit the site.
- Should project construction activities require temporary vehicle lane, bicycle lane, and/or sidewalk closures, the Applicant (Developer) shall coordinate with the Director of Public Works regarding timing and duration of proposed temporary lane and/or sidewalk closures to ensure the closures do not impact operations of adjacent uses or emergency access.
- Identify the routes that construction vehicles must utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the project.
- Specify all grading and equipment operations shall not be conducted between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday, and/or any time on Sunday or a Federal holiday, pursuant to Section 11.10.014, Special Provisions, of the Dana Point Municipal Code.
- Should project construction activities occur during general drop-off and pick-up hours for nearby schools (i.e., Nobis Preschool), traffic signs, traffic cone arrangements, and flaggers shall assist with ensuring safe pedestrian access along the project frontage for students.
- Require the Applicant (Developer) to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt, as a result of its operations. The Applicant (Developer) shall clean adjacent streets, as directed by the Director of Public Works, of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.
- All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site.
- Traffic controls shall be implemented for any street closure, detour, or other disruption to traffic circulation and shall maintain emergency access to the site.

With compliance with Mitigation Measure TRA-1, impacts pertaining to emergency access would be reduced to less than significant levels (Draft EIR page 5.7-17).

I55-3 This comment relates to concerns about the project's impacts on public safety and fire protection services in the project area. The Draft EIR analyzed the proposed project's potential safety impacts and concludes that the project would have a less than significant impact with mitigation relative to public safety. As explained in Draft EIR Section 5.13, *Public Services/Recreation and Utilities*, (Impact Statement PSRU-1, page 5.13-30 through 5.13-32), the project would be designed in accordance with Municipal Code Chapter 8.02, *California Building Code*, as well as Municipal Code Chapter 8.24, *California Fire Code*, which adopts by reference the 2016 edition of the California Fire Code. The California Fire Code includes fire safety-related building standards for construction, access, water mains, fire flows, and hydrants. Emergency access would be provided via a secondary emergency vehicle access driveway (EVA) located at the southern end of Sepulveda Avenue.

Emergency access only would be enforced through the use of bollards and/or similar devices (i.e., knox key boxes). The EVA would also be accessible from the Victoria Boulevard Driveway as well and would include appropriate hammerhead turnaround for emergency vehicles. Further, in conformance with General Plan Public Safety Element Policies 4.4, 4.5, and 7.1, the proposed project would be required to comply with building code requirements related to fire protection and prevention. Additionally, the project would be required to comply with General Plan Land Use Element Policy 3.1 and pay the respective fire-related development fees and exactions to the City. The implementation of Mitigation Measure TRA-1 would also reduce potential public safety impacts, as discussed in response to Comment I55-2.

From: Kimberly Lombard <kim.lombard28@icloud.com>
Sent: Sunday, March 5, 2023 7:49 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Apartments

I am begging you to not approve this apartment complex. Dana Point was not meant to look like Long Beach or Newport Beach. It will add too much traffic; it will also price out locals due to the high rents. You will take away the DP beach town that I have so many fond memories of growing up in.
Kimberly Lombard

I56-1

## I56. RESPONSES TO COMMENTS FROM KIMBERLY LOMBARD, MARCH 5, 2023.

I56-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Adele Roberson <adeleroberson@yahoo.com>
**Sent:** Sunday, March 5, 2023 11:20 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** Adele Roberson <adeleroberson@yahoo.com>; Robbie Roberson <robbiespartanmarine@gmail.com>
**Subject:** Victoria Boulevard Apartments

Good evening Ms. Dienes,

I have lived in the Capistrano Beach area since I was 3 years old, over 69 years. I attended Serra Elementary school from kindergarten to the 4th grade and then transferred to the newly built Palisades Elementary school when the Serra school closed down. My husband (also a local and who attended the same schools) and I currently live in Dana Bluffs, right up the street from our old school and have lived there 32 years. We are not new to the area. I57-1

We strongly oppose the plans to build apartments on the CUSD bus yard. The 349 units is going to generate TOO MUCH traffic in this small, quiet area of Capo Beach. Cars will be lined up and parked on both sides of the street as seen on Victoria Boulevard and over by the mobile park on Camino Capistrano. Traffic is already at its worst with all the new development approved by the city.

The CUSD needs to figure out a better solution to help the DHHS refurbishment. They want to spend $40 million dollars to retrofit a 50 year old building, yet do not have any plans to put any of that money towards the Palisades Elementary school, which is an older building. And the proposed project is in the area of the Palisades school, NOT in the DHHS area! This is one of the reasons we oppose the project. I57-2

No doubt this will also mean that several families will need to move in together to combine their finances to afford living in these high priced apartments. Most likely each family member will have a car, more than what is allocated in the apartment complex, so I wonder where they are all going to park? The proposed six level parking structure sounds like an eyesore, more so than a vacant bus yard. No one wants to look at a six level parking structure. This is a residential area, not a retail or commercial area to have a six level structure for parking!

I can go on and on about the negative impact this ridiculous proposal will have on this currently quiet, congestion free traffic area by the fire station. Don't ruin another area of this city with more construction, high three to five story apartment buildings, a six level parking structure, all that will generate more people to the area. I57-3

So, on behalf of myself and my husband, Robert Roberson, please note our opposition to the Victoria Boulevard Apartments. Thank you.

Regards,

Adele Roberson
Robert Roberson
25892 Vista Drive W.
Capistrano Beach

## I57. RESPONSES TO COMMENTS FROM ADELE ROBERTSON, MARCH 5, 2023.

I57-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I57-2 The commenter generally opposes the project and expresses concerns over the CUSD's planning process for the Dana Hills High School refurbishment. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I57-3 The commenter cites concerns regarding the proposed project's impacts relative to aesthetics regarding the parking garage. Refer to response to Comment I30-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Diane Troxel <d.troxel@yahoo.com>
Sent: Sunday, March 5, 2023 10:41 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Building Project 341 apartments capo beach

I58-1

Sent from my iPhone

## I58. RESPONSES TO COMMENTS FROM DIANE TROXEL, MARCH 5, 2023.

I58-1 This comment letter does not include any content; therefore, a response is not provided.

From: ROSE SPARKS <caporose@aol.com>
Sent: Sunday, March 5, 2023 10:54 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria project

I am a resident on Via Verde. I am not against a project at this site but this is way too massive and dense for this area. Not to mention not anything pleasing to the eye that I can see. Please re evaluate. Rose Sparks.

I59-1

## I59. RESPONSES TO COMMENTS FROM ROSE SPARKS, MARCH 5, 2023.

I59-1 The commenter cites concerns relative to the project's density and aesthetics. Refer to MR-5 regarding project density and MR-6 regarding aesthetics. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** maryellen murphy <maryellenfjyc@hotmail.com>
**Sent:** Sunday, March 5, 2023 12:19 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** NOA - Victoria Boulevard Apartments - Public Notice 21092

TO: Dana Point Planning Commission
From: Homeowner Mary Ellen Murphy at 34442 Via Verde, Capistrano Beach, CA 92624

Commissioners,

I am a long-time resident of Capo/Dana Point, and I am very concerned about the proposed apartment project.

I do not think the EIR has taken into consideration the existing homeowners in the area above this project.
Adding 349 apartments including a six-seven level parking structure will add to noise and air pollution. The noise and air pollution will have a direct impact on the Camino Capistrano/Via Canon street area. I did not see where the EIR covered a plan for noise barriers. I60-1

Please consider noise and air pollution solutions.

I am against this project.

Mary Ellen Murphy

## I60. RESPONSES TO COMMENTS FROM MARY ELLEN MURPHY, MARCH 5, 2023.

I60-1 The commenter cites concerns regarding air quality and noise impacts as a result of the project. The Draft EIR analyzed the proposed project's potential air quality and noise impacts and concludes that the project would have a less than significant impact with mitigation relative to air quality and noise. The closest sensitive receptors are residential (i.e., along Victoria Boulevard) and institutional (i.e., Orange County Fire Station No. 29, San Felipe De Jesus Catholic Church) uses located approximately 70 feet to the north and west of the project site. Any impacts to residents situated at greater distances would have less impacts from air quality emissions and noise, compared to these receptors 70 feet away. As explained in Draft EIR Section 5.8, *Air Quality* (page 5.8-14 through 5.8-23), all construction-related and operational impacts regarding air quality were found to be less than significant and no mitigation is required. As explained in Draft EIR Section 5.11, *Noise* (page 5.11-17 through 5.11-27), all construction-related and operational impacts regarding noise were found to be less than significant and no mitigation (including noise barriers) is required. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Steve Carter <stevec@hey.com>
**Sent:** Sunday, March 5, 2023 3:09 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Commnets re Draft EIR

Hello Ms Belinda,

Thanks for allowing me the opportunity to express my observations regarding the Victoria Blvd Apartment Proposal. Our family has been here for 63 years. We are not opposed to development, but question any development that destroy's the character and quality of life here in the City of Dana Point . Yes each part of the City has it's uniqueness. The health of Doheny Village is very important to the overall health of the city, residents and visitors. I remember some 30 years ago Dana Point expressed it's desire to become the California Riviera! This proposed project would certainly cheapen that vision.

First allow me to give some reference to the questions and observations I have. I've been aware over the last few years of the Doheny Village Working Group. Additionally of the City's efforts and willingness to solicit, value and adjust the City's Plan so the whole of Dana Point's uniqueness is complemented and enhanced.

I've additionally attended the High School meeting as well as the most recent one at the Community Center.

At the High School meeting ,the Toll Brothers spokesperson mentioned addressing the "elephant in the room" right out of the gate. He also made mention of a Public Open Space trail running along the back of the project possibly naming it The Richard Law Pathway as well as the total 1.1 acre of open space. It's my understanding the entire project is based on 5.5 acres. He also mentioned $40, 0000 coming back to the City/School District over I think 20 years

I61-1

Question: Does the school district own free and clear the entire 5.5 acres? Or is it a collection of city, school district and others that have a vested interest in how the land is used? Is what we are being told all out on the table or are there "back room " dealings going on that will be detrimental to those who live here as well as the integrity and character of the City? The $40,0000 sounds strangely similar to the California Lottery sales pitch being a boom to the schools! Yet the School District is always crying poor!

At the recent Community Center Meeting, the Toll Brothers spokesperson said the 15% Low income housing would be targeting towards helping teachers with housing. But how many would qualify? I didn't catch the persons name on the panel, but she laid out alternative build options for the site, as well as what the Coastal Commission approved. The longer the meeting went, the more I found my self asking the question "why is this proposal even being talked about" when it CLEARLY is contrary to everything Dana Point is! Sure there's the process to go thru, but seriously the applicant is offering to honor the surf culture with park benches and a lawn !

To help me get a better sense of the scale of the project in part, I reflected on my time as a fireman for a coastal city who has some dense housing projects. As I recall none were in residential neighborhoods. All had a 4 lane road on one side or another. In fact none had much curb appeal either, to reflect the overall sense of the city. I then spent sometime thumbing the the Draft EIR in the City's Planning Lobby. As I studied the Alternative Housing Plan compiled in part by the Doheny Village Group, I was pleasantly surprised it even existed. I've never heard anybody speak about "no development". Everyone that I have spoken with or heard speak has said NO to this massive, dense, behemoth proposal. As I see it now, the proposed Victoria Blvd Apt Project shows a total disregard to adherence to any of the City's, Doheny Village, Coastal Commission's parameters or the residents for that site.

I61-1 cont'd

As i mentioned to someone recently we need to find our moral compass again. To gain insight, courage and wisdom to get our feet back under us; individually, locally and as a country. We've become like a ship on the sea with no rudder. Just tossed every which way!

The guidelines set by the City, The Doheny Village Group and Coastal Commission's give us a clear path to follow for this project, regardless of any discomfort.

Thanks so much for your time.

Respectfully,
Steve Carter

## I61. RESPONSES TO COMMENTS FROM STEVEN CARTER, MARCH 5, 2023.

I61-1 This comment provides some historical background information regarding the commenter's involvement in the project's public participation process and generally expresses opposition to the project, stating they are opposed to any project that would "destroy the character and quality of life" in the project area. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** robert.mccumsey1@gmail.com <robert.mccumsey1@gmail.com>
**Sent:** Monday, March 6, 2023 9:24 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Re: Proposed Capo Beach Multifamily Project

Greetings Belinda,

As you're fully aware, any significant change within our community is always met with NIMBY Disapproval as well as Heartburn from the handwringing public. In an effort to sway your decision for the Multifamily Apartment Project under consideration your email address was circulated on Facebook to rally NIMBY support.

I62-1

As a long time area resident, dating back to 1965 I can truly say I've witnessed firsthand the growth withing our community. In my humble opinion, the multifamily project under review in a vast improvement over the existing CUSD Bus Yard, Its current condition/use is a complete eyesore thus meriting redevelopment. I'm completely confident the community will benefit from the developers proposed project.

I urge you to support the proposed project & expedite the approval.

Thank You.

Cordially,

**Robert Mc Cumsey**
**Phone:** (310) 420-9629
**Email:** Robert.McCumsey1@gmail.com

## I62. RESPONSES TO COMMENTS FROM ROBERT MCCUMSEY, MARCH 6, 2023.

I62-1 This comment provides a general introduction and expresses support for the proposed project. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Oren Anderson <kvt6263@cox.net>
Sent: Monday, March 6, 2023 12:42 PM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Specific Plan

All I want to know is how much and who is getting the payoffs from Toll Brothers. This project, in my opinion and many others, is absolutely not needed. If it is decided to develop something at this site in Capo Beach, why are you considering to approve the height variance of the building(s) to exceed the Dana Point height limits of 40 feet to double the height of 85 feet. For what it is worth I am against this project but definitely against waiving the height limit. You are allowing the beginning of a ghetto in our beautiful town just to increase profitability of the project for the developer. Again, who is getting the payoffs?

I63-1

## I63. RESPONSES TO COMMENTS FROM OREN ANDERSON, MARCH 6, 2023.

I63-1 The commenter expresses general opposition to the project and cites concerns relative to the proposed building heights; refer to MR-6. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**Comments on the Draft Environmental Impact Report and Victoria Boulevard Specific Plan for the Victoria Blvd. Apartments Development**
March 6, 2023

Jim and Barbara Reese
24631 Aquilla Drive
Dana Point, CA 92629
Dana Point Council District 2

We have lived in Dana Point for 42 years and have seen many changes to our small beach town. A long-term concern has been the threat of over-development that will do away with the town's character. One of the reasons for the incorporation of Dana Point in 1989 was to provide more local control over development including limiting high density, high height projects.

The Dana Point General Plan adopted in 1991 is intended to provide a vision of the future of Dana Point and to manage development. The General Plan includes standards for building design to prevent high density, high height developments. More recently, the Doheny Village Plan and Zoning District Update include design standards specifically for Doheny Village.

The proposed Victoria Boulevard Apartments project vastly exceeds the design standards for building density, number of stories, and structure height. This is a massive complex with buildings running 450 ft. along Victoria Blvd. and 370 ft. along Sepulveda Ave. The proposed building density (63.3 du/acre) and building height (75 ft.) are more than double the Doheny Village standards. The proposed project allows for 611 cars of residents which will result in excessive neighborhood traffic. Certainly the proposed project is not consistent with the Doheny Village Plan. I64-1

This project represents gross over-development that will ruin the community feel of the Doheny Village neighborhood. The proposed project will certainly not achieve the goal of providing net benefits to the surrounding neighborhood nor the Dana Point community as a whole.

Additional thoughts on proposed Victoria Blvd. Apartments project:

- Does the goal of maximizing revenue for CUSD and Toll Brothers over-ride the preservation of the quality of life in Doheny Village? Is the quality of life in Dana Point for sale? Must we allow over-development to adequately fund our schools?
- The proposed project will set a precedent for high-density development in Dana Point. Developers will have the expectation that they will also be allowed to ignore design standards. The ultimate result will be the failure of the General Plan to manage development in the City. I64-2
- If every proposed development project becomes a "special" project not subject to the General Plan, what is the purpose of having a General Plan?
- The EIR includes an alternate project, Alternate 2, that meets the design standards for Doheny Village. This alternative shows an example of the project scope that developers should be proposing to the City.
- The project site is essentially surrounded by Doheny Village. To maintain the quality of the community, it only makes sense for the proposed project comply with the design elements for the remainder of Doheny Village. I64-3

Based on the concerns expressed above, we strongly oppose the proposed Victoria Blvd. Apartments project. We are in favor of a project that meets the standards of the Doheny Village Zoning Code District Update.

## I64. RESPONSES TO COMMENTS FROM JIM REESE, MARCH 6, 2023.

I64-1 The commenter cites concerns regarding the proposed project's impacts relative to traffic, and the project's density/building height. Refer to MR-2 with regards to traffic and refer to MR-6 with regards to density/building height. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I64-2 The commenter generally expresses opposition to the project and opines that the quality of life in the project area is "for sale" and would set a precedent for high-density development in the project area in the future. The commenter questions the purpose of having a General Plan if every proposed development becomes a "special project." The commenter also expresses support for Alternative 2.

In addition, the commenter opines that the "Village Commercial/Residential Zoning District Development" Alternative meets design standards for Doheny Village. As described in Draft EIR Chapter 7, *Alternatives to the Proposed Project* (page 7-9 through 7-17), this alternative would not be consistent with existing zoning/design standards. In fact, similar to the proposed project, this alternative would also require a General Plan Amendment, Zone Change, Local Coastal Program Amendment, Coastal Development Permit, Tentative Parcel Map, and Site Plan Review. In addition, while this alternative would achieve eleven of the project's basic objectives, it would not achieve those objectives to the same extent as the proposed project for some objectives. Refer to Draft EIR Table 7-3, *"Village Commercial/Residential Zoning District Development" Alternative and Project Objectives*, for further discussion.

This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Jim Schad <seapointejim@gmail.com>
**Sent:** Monday, March 6, 2023 3:11 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Apartment Project Draft EIR

Dear Belinda,
I am writing to share some of my opinions regarding the proposal for the General Plan Amendment to allow the 349 apartment development known as the Victoria Blvd. Apartments. I am opposed to this project for two main reasons cited in the Draft EIR. These two reasons are the negative environmental impacts and the lack of continuity between this project and the Doheny Village Plan. I have also added additional comments regarding traffic and this project.

1) The project as proposed will have noticeable negative environmental impacts when compared to the two alternatives listed in the EIR. The "do nothing" alternative will have virtually no environmental impact, however doing nothing would be a poor choice for the community and the school district. The "use the current zoning" alternative is the best option because: it only poses minimal environmental impacts; it provides some financial income for the school district; and would only be a minor disruption to the Doheny Village Community. This "current zoning" alternative is also in keeping with the recently approved "Doheny Village Plan" (DVP). Although the site of the proposed project was not allowed to be included in the "merchants working group"/city staff discussion that led to the "DVP", the site is located within Doheny Village and therefore compatibility with the proposed apartment project and the "DVP" should be considered. This is not just my personal opinion as it was also a talking point proffered by the Planning Department at their 2/27/23 meeting. I65-1
2) In discussing this project with residents within and outside of Doheny Village, the general consensus is that the proposed apartment project is not in any way compatible with the "DVP" or anything else existing in Dana Point. Further, opening the door to a massive project like this could set a precedence for other developers wanting to build massive projects in Dana Point. I65-2
3) Although the applicant states that there is not a traffic concern associated with this proposed project (except for one that may arise in the year 2045), we cannot assume that there will not be negative impacts from traffic on Doheny Village and the surrounding area especially since this proposed project only has 2 streets for ingress/egress, which puts an additional burden on traffic. A typical traffic study grades intersections on an A through F standard. An intersection can go from an "A" grade to a "D" grade and the applicant would be within his rights to say traffic won't be impacted, when in reality there will be real-life, everyday impacts. To further complicate traffic report possible discrepancies, it appears that the latest addendum to the EIR relating to traffic foregoes the A through F grading standard, and opts for a grading style that appears objective rather than subjective. I think the public would benefit from a better understanding of the traffic grading as it relates to this proposed project, as I myself do not fully comprehend it. As a resident in Doheny Village I am acutely aware of traffic patterns in this area and 349 apartments with an allotted 1.9 parking spaces per unit at a minimum will affect traffic and parking in the area. This can be evidenced by watching the drastic change in traffic each Sunday when the two churches have services and there is an influx of vehicles to the area. The churches take precautions to help ease traffic (signage and direction), but these precautions will not be available if this apartment project is approved and built and 600+ cars are added to the area. As an aside the applicant has offered to allow the churches to use 50 of the proposed project's internal parking spaces on Sundays as the churches currently use the existing site for parking. My concern is that these proposed 50 internal parking spaces for church use on Sundays will come from guest/visitor parking, thus forcing up to 50 guest vehicles to park on I65-3

the surrounding streets where there is not enough parking for the current residents of the area. Although the applicant is proposing angled parking on the south side of Victoria Blvd. to increase parking, it is not sufficient to accommodate an influx of 50 guest/visitor cars every Sunday.

I65-3 cont'd

While I am sensitive to the school districts needs for revenue, this proposed project will unduly burden the citizens of Dana Point permanently. I urge you to consider the ramifications a project of this size will have on the future of Doheny Village and recommend a smaller project that conforms to the existing zoning.

Sincerely,
James Schad

## I65. RESPONSES TO COMMENTS FROM JIM SCHAD, MARCH 6, 2023.

I65-1 The commenter opines that the project should adhere to the existing zoning and design standards. The decision whether to modify existing zoning standards is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I65-2 The commenter generally expresses opposition to the project and opines that the project would set a precedent for high-density development in the project area in the future. Refer to response to Comment I40-3. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I65-3 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Courtney Welter <courtmichelle1@yahoo.com>
**Sent:** Monday, March 6, 2023 3:36:06 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** New project

we DO NOT want this community built. As part of a group of over 50 members, we would like our voices heard. The community you plan to build In Dana Point off of Camino Capistrano will be disruptive to the community as a whole and your plans for an “affordable living” is laughable at best. I66-1

Is there a city hall meeting or number to call where myself and others can exercise our right to contest this abomination of a plan?

Best,
Courtney

## I66. RESPONSES TO COMMENTS FROM COURTNEY WELTER, MARCH 6, 2023.

I66-1 The commenter generally opposes the project, stating the proposed development would be "disruptive" to the community. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

COMMENT LETTER I-67

# Comments In Response to
# NOA of a Draft Environmental Impact Report (Draft EIR)
# Victoria Boulevard Apartment (CUSD South Bus Yard)

March 5, 2023

Belinda Ann Deines, Principal Planner
City of Dana Point
Planning Division
33282 Golden Lantern
Dana Point, CA 92629
bdeines@danapoint.org

Subject: Response to Notice of Availability (NOA) of a Draft Environmental Impact Report (Draft EIR)

Project: Victoria Boulevard Apartment
State Clearinghouse No. 2021070304

Lead Agency: City of Dana Point, California 92629

Dear Belinda Ann Deines,

Hello, my name is Steven Carpenter, and I am a resident of Capistrano Beach, Dana Point. My family moved to Capistrano Beach in 1959. I've lived almost my entire life in Capo Beach, except for the first five years in Santa Ana and then during my time away in the USAF and education. Growing up, I went to Serra Elementary School from first to half-ways through third grade when we moved to Palisades Elementary. I moved back and purchased my first home here in Capo Beach. I have witnessed my more than fair share of expansion, building I-5, and cities like Laguna Niguel, Mission Viejo, and others as they developed and expanded. Please let me state upfront I am for reasonable and sensible development. After all, I come from the electrical construction/contracting and construction management industry, which I started here at Dana Point.

Approx. Five years ago, the Mayor and Council members approved a meeting with residents and businesses to review the existing zoning irregularities caused by Dana Point's Form-Bases Plan Zoning. A previous City Council approved the abnormalities and design for overdevelopment, and the Company hired to create it. The new Council members approved a workgroup that would work with the City's Planning Department to unravel the issues caused by the Form-Based Plan. The Form-Based Plan caused approx. ten to fifteen percent of the Doheny Village to become Non-Complient with the zoning plan.

I67-1

As a Doheny Working Group, and Doheny Village Plan member, we worked together as residents, business owners, and a community to resolve these issues while looking forward to the future of the Doheny Village. After all these years of working together with City Planning, we finally saw the results of our efforts. On February 9, 2023, the California Coastal Commission approved (Th12a-2-2023-report) & (Th12a-2-2023-exhibits), ultimately allowing for **responsible and sensible community-based zoning** of the Doheny Village Plan. Responsible means the 30 dwellings per acre approved for this property, NOT the proposed 79 dwellings per acre.

I could go on and on regarding the errors in this Victoria Blvd. Apartment Draft EIR, but I will address a few items. I67-1 cont'd

**Executive Summary, 1.2 & EIR Section 5.1**: "Under the Specific Plan, development density within the project area would not exceed 63.3 dwelling units per acre, yielding a maximum of 349 dwelling units on the 5.51-acre project site." EIR Section 5.1 LU-2, LU-3, LU-3 (LCP Amendment February 9, 2023), LU-5, and Cumulative Impacts.

Response: The subject property is approx. 4.41 and zoned for 30 units per acre - NOT 5.51 acres. The other 1.1 acres are zoned "Recreation District (REC)). To be used for Recreational Use, not an Apartment Project. A proposed project would be allowed 132 dwelling units on the 4.41 acres. On November 16, 2023, during the Toll Brothers' presentation at Dana Hills High School, they stated they were allowed 50 dwelling units per acre. On February 9, 2023, the California Coastal Commission approved the Local Coastal Program Amendment (Th12a-2-2023-report & exhibits), explicitly stating the property is zoned for 30 dwellings per acre. I67-2

**EIR Section 5.7 TRA-1, TRA-3, TRA-4, Cumulative Impacts and Transportation:**

Response: Both transportation studies are flawed. They do not accurately reflect the actual traffic studies with analysis after project(s) completion. You don't have to look any further than the City of Laguna Nigel, Forbes Road/Crown Valley Parkway, which has a project almost identical to the proposed Victoria Project. The traffic flows are extremely more volatile than the original propped traffic study. Crown Vally Parkway traffic flows can handle the same traffic since it is about ten times that of Victoria Blve/Doheny Park Road. The intersections at Crown Valley Parkway/Forbes are not managing the traffic flow. Significant traffic backup on Cape Drive and Forbes. Vehicles backed up at stop signs while waiting for traffic flow are NOT conservation or open space friendly. If not for the additional Forbes and Cape Drive construction, Cape Drive would be equivalent to the old (OCIR) Orange County International Raceway. Vehicles used to race down the street toward Forbes to get in line and wait for the CVP signal; it will happen again once the new project completes. We can expect the same situation if this project moves forward as proposed. I67-3

**Parking, Parking Table 3-2:**

Response: The proposed parking plan does NOT allow for the actual tenant and guest vehicle parking needed for a project of this size. Once again, in Laguna Niguel, most one-bedroom units consist of two vehicles per dwelling. The additional vehicles end up parking in guest parking spaces or on the street. The figures are due to the number of occupants living in these dwellings. Many of the two-bedroom unit house 3 or 4 single/married residents. I67-4

Guest parking is underestimated for the amount of parking needed. Most of the new apartment projects in Laguna Niguel required a minimum of .25 guest spaces per dwelling. Two-bedroom units often have two to three vehicles per dwelling.

**Transportation 5.7.2: Interstate 5 (I-5)** is an 11- to 13-lane divided freeway in the project vicinity providing regional north-south circulation through Orange County and the State of California. I67-5

Response: Interstate 5 (I-5) is NOT an 11 to 13-lane divided freeway. I-5 is ten lanes total North and South of State Route 1 (SR-1). The local streets of Sepulveda, Victoria, and Camino Capistrano are packed to capacity by vehicles from the surrounding area; no availability for parking.

I67-5 cont'd

In closing, the density of this proposed project will impact the quality of life, pollution, noise levels, water shortages (BTW, we/ve been in a drought for over ten years), and overall traffic to the surrounding areas of Doheny Village. The additional 650 plus tenant vehicles twice daily traveling will cause undue hardships to the local streets and community. It also doesn't consider the same hardships caused by the number of daily guesses traveling to and from the proposed project.

The Capistrano United School District needs to be held accountable for its efforts for Victoria Blvd. Apartments. The Victoria Property was donated to the district for education use, and they have severely dropped the ball for decades! Doheny Village is NOT a location for a project of this size.

I67-6

I support the proposed "Village Commercial/Residential Zoning District Development" Alternative Plan of 114 dwelling units. The Alternative Plan could be increased to the 132 approved zoning for the property.

Respective submitted,

Steven Carpenter

## I67. RESPONSES TO COMMENTS FROM STEVEN CARPENTER, MARCH 5, 2023.

I67-1 This introductory comment provides background on the commenter's familiarity with the project area and recent Doheny Village Plan. This comment is acknowledged.

I67-2 The commenter cites concerns regarding the proposed project's inconsistencies with the existing zoning regulations regarding density. The proposed Specific Plan establishes new development standards for the project site, including allowed density. As detailed in Draft EIR Table 3-1, *Victoria Boulevard Specific Plan Development Standards* (page 3-15), the proposed maximum density is 63.3 dwelling units per acre. The decision whether to modify allowable density on the project site is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I67-3 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I67-4 The commenter states the project does not provide enough parking; refer to MR-4. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I67-5 The commenter states that Interstate 5 is ten lanes total north and south of State Route 1 and that the local streets in the project area are packed to capacity with no availability for on-street parking; refer to MR-4. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To

that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I67-6 The commenter claims that the proposed density of the project will result in pollution, noise, water shortages, and increased traffic congestion. The Draft EIR analyzes the project's potential impacts with regards to air pollution in Section 5.8. *Air Quality*, noise in Section 5.11, *Noise*, water supply in Section 5.13, *Public Services/Recreation and Utilities*, and traffic in Section 5.7, *Transportation*. Based on the analysis, the project would result in less than significant impacts in such regards. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

The commenter also supports the "Village Commercial/Residential Zoning District Development" Alternative. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Chris J. Van Ruiten <cvanruiten@cox.net>
**Sent:** Monday, March 6, 2023 3:57 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** 'Sheryl Van Ruiten' <svanruiten@aol.com>
**Subject:** Victoria Blvd. Apartments - Draft EIR Comments and Input

Belinda, the comments outlined below express our concerns and opposition to the planned development noted above. However, we are sensitive to the City's need for additional/affordable housing and would be supportive of the "V-C/R Zoning District" Alternative for a 114-unit development which is environmentally superior as outlined in the draft EIR and more consistent with the existing and future Doheny Village District surroundings.

**NOISE**

Our Capistrano Beach residence is in the Dana Bluffs community (Via Verde and View Point Dr. West) at the top of the slope south/east of the I-5 PCH off/on ramp and across from the proposed site. Given the 5/6-story height planned for buildings on the north side of the I-5 PCH northbound off ramp, we are concerned about traffic noise deflection emanating from the proposed structures and up the opposing slope impacting our home and those of our neighbors and residents along Via Verde. We already experience some traffic noise from the PCH I-5 on/off ramp below us, and we are aware of how noise from the Doheny Village area impacts the quiet enjoyment of our home during outdoor events held at the Capo Beach Church. We don't see Noise Data relative to residences on or adjacent to Via Verde which could be impacted by the significant height of structures being proposed. Please advise what analysis has or can be done to assess this impact and mitigation of noise deflection as appropriate. I68-1

**TRAFFIC**

While traffic studies obtained for the proposed project might theoretically state that no mitigation is necessary for surrounding streets, the reality is the site is fronted by only 2 narrow, and heavily parked residential streets. The now common mid-rise, wrapped apartment developments we are familiar with in Laguna Niguel, Irvine and Newport Beach which are similar to this proposed project are all located on 6 and 4 lane arterial streets with the capacity to handle additional traffic flow from these complexes. In all reasonableness, such locations is where these massive developments belong. The development site being considered is "land locked" and there is no feasible way to enhance streets to accommodate an infill project of this scale. All the streets in the Doheny Village residential/commercial area are narrow, 2 lane streets that are heavily parked during most hours of the day which will become impacted by the additional vehicles of the anticipated +/-1,000 apartment residents during peak travel times of the day. There are no adjacent public transportation facilities accessible by residents and we are not aware of any plans by the developer to provide shuttle services for apartment residents to public transportation facilities. Beyond the impact on streets surrounding the site, we have great concern about the northbound PCH-Doheny Park Rd. offramp. In the afternoon, this offramp already backs up and with increased demand could likely back up beyond the merging lanes of the dual I-5 south and north bound off ramps to northbound PCH. Such congestion and the high speed of traffic exiting these two off ramps would be life threatening. Has this impact been addressed in the traffic studies? I68-2

**PARKING**

While the developer feels the project has more than adequate parking based on generic standards outlined, there are unique considerations that very likely could impact the number of resident vehicles. Given the beach location and high rents of the proposed apartments, it is likely that greater than normal shared living arrangements could be encountered within the proposed complex. Numerous studio/1 bedroom, 2 bedroom and 3 bedroom apartments may likely be occupied by 2, 4 and 6 single occupants, each with a separate vehicle. How does the developer plan to control such excessive demands on parking? Also, has the City confirmed that resident assigned parking will NOT be fee-based I68-3

or result in higher rental rates? Any such financial impact of providing resident parking could motivate residents to park on already overcrowded streets. What practical restrictions on resident occupancy will the City and/or the developer impose to ensure all resident vehicles have adequate off-street parking? I68-3 cont'd

**DENSITY/ASTHETICS**

The high density of the project is concerning given the quaint Doheny Village location and the significant degree to which density exceeds surrounding approved zoning. Given the 1.1 acre Coastal Commission open space requirement for the 5.5 acre site, it seems disingenuous to state the proposed specific plan density as 64 units per acre. A more accurate density for the remaining 4.4 acre developable site is 80 units per acre (349 units / 4.4 acres). This represents 266% greater density than the recently approved plan for the surrounding area and unconscionable levels of density by all Dana Point standards. I68-4

The "bird's eye" view renderings prepared for the proposed development are deceptive and visually understate the scale of the project in consideration of the surrounding structures. City planning officials and leaders considering approval should have available more realistic renderings from a ground-level perspective and/or a scale model of the project and surrounding structures and topography to understand the overwhelming scope of the project and its aesthetic inconsistency.

**COMMUNITY CONSIDERATIONS**

All City officials considering approval of this development should give overwhelming weight to the Doheny Village and Capistrano Beach resident input and community impact as these residents will bear the brunt of the obvious environmental impacts. Other than some self-serving support of the project by local Doheny Village businesses, the City residents expressing support for the project are doing so solely because of financial benefits to CUSD and, more specifically, because of improvements for Dana Hills High School. Virtually all supportive residents live outside of Doheny Village and Capo Beach neighborhoods. Firstly, responsibility for funding area schools and needed facility improvements rests with CUSD, and the City's considerations for approval of this project should be void of any significant influence of such factors. Also, the expected $40M of funding for Dana Hills will fall far short of this original estimate given rising interest rates and the increased cost of debt service of proposed bonds. Secondly, but of even greater concern, the Doheny Village and Capistrano Beach children would be disenfranchised by the CUSD's plan to dedicate financial benefits from the project exclusively to Dana Hills given the fact that our area of the City is outside of the designated Dana Hills school attendance zone boundaries. Therefore, we implore the City to heavily weigh the concerns of citizens most exposed to the project's detrimental impacts and that these residents would suffer "insult to injury" by CSUD's ill-conceived financial plan which provides no benefit to students from our neighborhood. I68-5

We appreciate consideration of the stated concerns by City planning staff, officials and leaders.

Regards,

Chris J. Van Ruiten
Sheryl Van Ruiten
25946 View Point Dr. West
Capistrano Beach, CA 92624

## I68. RESPONSES TO COMMENTS FROM CHRIS VAN RUITEN, MARCH 6, 2023.

I68-1 The commenter cites concerns regarding noise impacts as a result of the project. The Draft EIR analyzed the proposed project's potential noise impacts and concludes that the project would have a less than significant impact with mitigation relative to noise. As explained in Draft EIR Section 5.11, *Noise* (page 5.11-17 through 5.11-27), all construction-related and operational impacts regarding noise were found to be less than significant and no mitigation is required. The commenter is concerned about project-generated noise impacting the Dana Bluffs community at Via Verde and View Point Drive West. This community is located south of the project site across the heavily trafficked State Route 1. Given that construction and operational noise impacts to closer sensitive receptors adjacent to the project site (70 feet away) would result in less than significant levels, it can be assumed that noise generated at the project site would substantially attenuate at a further location (i.e., the Dana Bluffs community) and have less than significant noise impacts as well. The shielding of existing buildings that interrupt line-of-sight conditions further reduce noise levels from point sources.

I68-2 The commenter cites concerns regarding the proposed project's impacts relative to traffic; refer to MR-2. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I68-3 The commenter states the project does not provide enough parking; refer to MR-4. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I68-4 The commenter cites concerns relative to the project's density and aesthetics. Refer to response to Comment I67-2 regarding density and MR-6 regarding aesthetics. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I68-5 The commenter states that City officials should give weight to Doheny Village and Capistrano Beach residents and their general opposition to the project and protect them from the environmental impacts of the proposed development. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Kaikea Wilinski <ckwili21@g.holycross.edu>
**Sent:** Monday, March 6, 2023 4:23 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Public Comment

Dear Belinda,

I am writing you today to express my adamant displeasure with the recent proposals to the CUSD bus lot in Capistrano Beach. Being born and raised in this city, I could not be more ashamed that such a proposal is being pushed through. There has seen a significant rise in development that has been negatively impacting our community. After viewing the proposed project introduced by the Toll Brothers, it has come to my attention that this city is putting the priorities of the contracting industry over its own residents. My family participated in a survey over six months ago regarding the state of our city. After reviewing the results, one of the biggest concerns of all residents was the issue of overdevelopment. Clearly, this was something that should have been considered by the city as one of the biggest priorities. As residents of Capo Beach, we agree that there should be some type of renovation primarily toward the Doheny Village. Proposals to renovate should be sensible, not ones that replicate large coastal cities like Newport Beach and Huntington Beach. Our small community is seeing development of large apartment complexes that ruin the overall atmosphere and aesthetics of Dana Point. The proposed 300+ residents that will be living in the complex will be a major inconvenience, being that this area lacks the space for parking, and it will only burden the current residents that surround the complex. I feel that the city should look for other ways of utilizing that property instead of quickly handing it off to the Toll Brothers. You will be doing a disservice to the Capo Beach residents, and frustrating all the residents that complained about overdevelopment. I feel that there are other ways to fund the projects that Dana Hills is requesting. Please listen to your community and your residence, and reject this proposal from the Toll Brothers.

I69-1

Sincerely,

Christian

## I69. RESPONSES TO COMMENTS FROM KAIKEA WILINSKI, MARCH 6, 2023.

I69-1 The comment is concerned about overdevelopment in Capistrano Beach and generally opposes the project. The commenter also raises concerns regarding inadequate parking in the project area; refer to MR-4 regarding parking adequacy. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Rhys Parsons <rovrhys@gmail.com>
**Sent:** Monday, March 6, 2023 4:44 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Doheny village apartments

Good afternoon,
I am writing to you today to voice my feelings against the project. As a resident of capo Beach since for the last 25 plus years ( since I was 8) I feel this project would not provide the so called benefits that "affordable housing" has been marketed as.
The traffic, pedestrian traffic and overall large footprint is not the open, low impact housing that capo Beach is known for.
The many new housing developments in dana point (lantern district, apartments near San Juan creek) have many unsold units as well as being completley not "affordable housing."

I70-1

Please reconsider the doheny village project and don't bring the "Newport Beach" vibe thwt many people have been unhappy with in the current area and harbor.

Sincerely,
Rhys Parsons

## I70. RESPONSES TO COMMENTS FROM RHYS PARSONS, MARCH 6, 2023.

I70-1 The commenter states that the proposed project would not provide the benefits it claims, such as affordable housing, and is generally concerned about increased traffic congestion in Capistrano Beach. Refer to MR-2 regarding traffic congestion. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Kbwilinski@cox.net <kbwilinski@cox.net>
**Sent:** Monday, March 6, 2023 4:48 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Capo Beach Apartments Public Comment

As a resident of Capistrano Beach for 30 years, I could not be more disheartened by what our city has transformed into. What used to be a small beach community has turned into another overcrowded Newport Beach. Whether it is summer or even winter, week day and weekend traffic is at its worst. Massive developments that lack in any style or aesthetic appeal are popping up all over Dana Point. Yet it seems to me that our city government is not respecting the concerns of its residents. I am very much in opposition to these proposals that are being presented for the bus lot in Capo Beach. We already cannot handle the major traffic congestion and the amount of people that are rapidly moving into the city already. As far back as I can remember, we have been asking for a reasonable update on the Doheny Village. This is the complete opposite of what we have been asking for. Unaffordable luxury apartments are not what we want more of. I am utterly ashamed at the developments that have been rushed through the approval process in the last 10 years. Having an industrial sized desalination plant, and a plethora of an apartment complexes is far from what Capo Beach residents asked for. I cannot express enough displeasure for the Toll Brothers project and any other future project they will try to weasel their way into building. Our City Council was elected by the residents, however, it seems they are not listening to their own constituents. We are not Irvine, we are not Newport, and we are not Huntington. Please do not approve this project. I would rather see a public park or something recreationally beneficial to the residents than this monstrosity that will be built there.

I71-1

Karrie Bechtloff

## I71. RESPONSES TO COMMENTS FROM KARRIE BECHTLOFF, MARCH 6, 2023

I71-1 The commenter raises concerns regarding traffic congestion and aesthetic impacts on the surrounding community. Refer to MR-2 regarding traffic congestion, and to MR-6 regarding aesthetic impacts. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Diane Troxel <d.troxel@yahoo.com>
**Sent:** Monday, March 6, 2023 5:26 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Capo Beach proposed apartment comples

Please be advised that as a resident of Dana Point and property owner of 30 years, I strongly oppose the proposed project in the Capistrano Beach area covering the school bus lot and others in the area of Victoria and Sepulveda Ave. I72-1

Best regards,

*Diane Troxel*

Cell: 949-661-3573

## I72. RESPONSES TO COMMENTS FROM DIANE TROXEL, MARCH 6, 2023

I72-1 The commenter opposes the proposed project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Philip Tillery <peejaytillery@gmail.com>
**Sent:** Monday, March 6, 2023 5:10 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Victoria Blvd. Apartment Project

Below is a brief comparison of the Toll Bros. proposed project with City Lights, a Shea Homes project completed in 2001. It is fairly obvious that the proposed project is attempting to shoehorn a ridiculous number of units onto a small parcel. Also City Lights does a good job of handling its parking needs. The Toll Bros. project renderings show angle-in street parking all along Victoria Blvd., a sure indication the developers already know that on-sight parking won't be enough. I could go on.

I73-1

I am not opposed to redeveloping the site. Cut the proposal in half. We can start a reasonable discussion from there.

| Property | City Lights, Aliso Viejo | Victoria Apartments, Dana Point |
|---|---|---|
| # Units | 793 | 349 |
| Density | 45.6 / Acre | 63.0 / Acre |
| Building Height | 4 Story | 5 – 6 Story |

I73-2

## I73. RESPONSES TO COMMENTS FROM PHILIP TILLERY, MARCH 6, 2023

I73-1 The commenter raises concerns regarding the density of dwelling units proposed for the project, as well as parking availability. Refer to MR-4 regarding parking requirements. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I73-2 The commenter provides a table comparing the proposed project to a separate, completed project in Aliso Viejo. This comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

March 6, 2023

COMMENT LETTER I-74

Kathryn J. Carpenter
P.O. Box 2546
34212 Sepulveda Ave.
Capistrano Beach, CA 92624-0546
Email: kjcarpenter@flash.net
Tel: (949) 496-5905

ATTN: Mrs. Belinda Ann Deines, Principal Planner
City of Dana Point / Planning Division
33282 Golden Lantern
Dana Point, CA 92629
Email: bdeines@danapoint.org
Tel: (949) 248-3570

**RE: VICTORIA BOULEVARD APARTMENTS / Environmental Impact Report**

Dear Belinda Deines, Principal Planner and City of Dana Point Planning Commission/Department,

Our family has resided, opened, and operated their business in Capistrano Beach; specifically, the "Doheny Village" since 1959. Prior to our family building their Commercial/Residential Electrical Contracting office and home at 34212 Sepulveda Avenue; the family rented a unit on the corner of Victoria Blvd. & Sepulveda Avenue. To date, this property remains in our family. I am a long-time "Doheny Village" resident who as a child attended Kindergarten, 1st Grade at Serra Elementary School, Brownie/Girl Scout meetings in the Auditorium, was active in the Summer Arts & Recreation Programs, was a member of Girl's Softball League; plus, all the children and adults in this community had wonderful playgrounds, grass areas and fields to enjoy right in our own backyard. (Attached, please find previous correspondence regarding this project dated Aug. 11, 2021; LA Times Bus Yard Article 9/15/1990; 5 photos of ball fields and activities at Serra School). I74-1

As per the California Coastal Commission's approval of the Dana Point's Doheny Village Plan on February 9, 2023; we implore the City of Dana Point Planning Department to preserve the CUSD "Bus Yard" property as "Commercial Open Space" (LCPA-5-DPT-21-0059-5 (CF and REC). As the Planning Commission entertained public comments from residents of Capistrano Beach and the "Doheny Village" community, on Monday, February 27, 2023; we are opposed to the extensive and massive Victoria Boulevard Apartment Living project proposed by Toll Brother's Developers. I74-2

Our community, spoke loud and clear, stating the scope and size of this major type of construction does not fit our neighborhood "Village", accommodate our already busy streets, crowded street parking problems and should NOT be developed on the CUSD Bus Yard property. The public comments by the "Doheny Village Residents" on Monday addressed many of the concerns I personally have regarding this project; 200% over size and not in line with the City of Dana Point's Village Plan. I am not against development or Toll Brother's Developers; but specifically what CUSD has allowed them to present for the CUSD SCHOOL property. CUSD has not been present or had any representation at any of the City of Dana Point public meetings to address and/or answer any of the pertinent questions we, the residents have given or expressed regarding the school Bus Yard. Namely, the COMMUNTIY RECREATIONAL DISTRICT (REC) which CUSD was entirely taken away from our community and no proposals for any new public parks, but only a one-half acre of a circle on the corner of Victoria and Sepulveda proposed by the proposed "Lessee's". This is basically an accommodation for the apartment complex residents, who need a "doggy green space" for their pets. I74-3

There are several other factors which need to be addressed regarding the original "Grant Deed" restrictions of the CUSD property as to how CUSD can "lease" this land in the first place, and proof from the County of Los Angeles and/or Orange County as to when and how these "DEED RESTRICTIONS" were taken off the "GRANT DEEDS"? I74-4

I kindly request the City of Dana Point Planning Commission and Department to hear the pleas of the residents of Capistrano Beach (City of Dana Point) and keep "Doheny Village" an eclectic, quaint "VILLAGE". Please do not turn us into a high-rise apartment complex community and thoroughfare to access the freeway on & off ramps. SEPULVEDA AVENUE will experience massive traffic, if an additional 600+ cars are on the road and most likely will need to find an alternative route, other than Victoria Blvd., to access the NB 5 Freeway, i.e. via Sepulveda Avenue & Camino Capistrano. Street parking is already a problem on our streets; a driver's visibility is impaired immensely while egressing from both alleyways to Sepulveda Avenue and into the surrounding streets. I74-5

My sincere thanks to the Planning Commission and Belinda Deines for your time and consideration. I pray the future will be a positive, community friendly environment for all the children, families, and residents of "Doheny Village"! I74-6

With kindest regards,

Kathryn Carpenter

Kathryn Carpenter

August 11, 2021

Kathryn J. Carpenter
P.O. Box 2546
Capistrano Beach, CA 92624-0546
Email: kjcarpenter@flash.net
Tel: (949) 496-5905

ATTN:
Ms. Belinda Ann Deines, Principal Planner
City of Dana Point / Planning Division
33282 Golden Lantern
Dana Point, CA 92629
Email: bdeines@danapoint.org
Tel: (949) 248-3570

**RE: VICTORIA BOULEVARD APARTMENTS / Notice of Preparation of a Draft Environmental Impact Report**

Dear Ms. Deines / City of Dana Point,

As a longtime resident of Capistrano Beach (specifically Doheny Village, 34212 Sepulveda Avenue); I would like to address a few topics regarding the City of Dana Point's revitalization plans for our Village. I attended the first Revitalization meeting held on November 5, 2011 and addressed the following questions to the CUSD & to the City of DP Planning Manager at the time.

I74-7

Residents of this community have always heard the original "Serra Elementary School" (currently the CUSD BUS YARD) property was donated to the CUSD by private landowner's and by the "Doheny Family". Serra Elementary School was dedicated to the community for the sole purpose of being dedicated to the children of this Village. I attended the CUSD meeting around 2009; the time they were considering selling this property. I addressed the School Board & inquired about the private land donations & "Doheny Family" and asked about the very specific land uses for this property. During the board meeting, CUSD stated they did not know about it, and would look into this matter and get back to me. To date, I have never received any communication from the CUSD Property Manager, whom I personally spoke with after the meeting, and never received an answer to any of these questions as being "dedicated for a SCHOOL and for the children" of the community!

My main question is, if the CUSD are the current "property owner's", how can they sell, lease, or even allow anything other than what was strictly stated in the Property Grant Deeds (Donated Land)? Please have the CUSD find ALL the original "GRANT DEEDS" from all landowner's who donated land to construct the "Serra Elementary" CUSD during this time. One record we have found (Book 396 / 37093) Mable McGee; December 10th, 1926; between the party of the first part, and "Serra School District of Orange County, the party of the second part. This deed has restrictions which remains with the land: "The property shall be used by the party of the second part…for public school purpose only but not for a reform school" and other conditions. "Upon breach of the foregoing conditions, or any of them, the whole of the land hereby conveyed shall revert to the party of the first part…".

I noticed the CUSD Bus Yard is considering a 365 Apartment Complex "Victoria Boulevard Apartments" project for the "BUS YARD" site. To date, I do not see ANY PUBLIC, Community Use or Parks being reinstated and reallocated back into the Doheny Village community. I hope the City of Dana Point and the CUSD Bus Yard plans to restore our little village back into a Children friendly community.

There are MORE CHILDREN living in the Doheny Village area today, then when I grew up in this neighborhood; and now there is ABSOLUTLEY NO PLACE for the children to play. I attended Kindergarten / 1st Grade at Serra Elementary School. When the School District demolished the beautiful auditorium & grounds; the district took away all the wonderful playgrounds, 4 baseball fields, summer recreation, sports & art programs we had in the area. This once lovely PUBLIC facility is now used as a "BUS YARD" and DUMP SITE which imports landscape waste from the surrounding schools in the district. Our family improved our property with the addition of a new balcony back in 2007. Our views encompass the "unsightly trucks unloading and moving landscape waste, dirt & debris". This is not how the residents of Capistrano Beach would like our entrance way to be viewed or the way to welcome visitors into our beautiful City of Dana Point. I74-8

We hope the City of Dana Point will have the CUSD restore the PUBLIC USE and community friendly property back to its ORIGINAL land use, from and donated to the "Serra School District of Orange County" by all the generous previous private landowners of the Doheny Village community.

PLEASE have a heart not only for the children of "Doheny Village" but for all citizens residing within our community! Our village is and has been the forgotten "Stepchild" of the City of Dana Point. To date, "Doheny" has no Public Parks, Playgrounds, Boys & Girl's Club, Community Center, Senior Center, Summer Programs, Community Swimming Pool, Community Theater, Museum or Art Center!

I am happy to see the City of Dana Point is adapting our SURF ICONS / Cultures into the community. DOHENY VILLAGE / CAPISTRANO BEACH is where Hobie Alter, John Severson, Whitey Harrison, Ronald Drummond, Mickey Munoz, Tom Morey; Surf Icons & Innovator's in the industry who lived & worked in the Doheny Village. Many of these talented men lived and created their visions right here on "Sepulveda Avenue", and in the industrial area behind the US Post Office. I hope the Revitalization Planning Committee will seriously consider including Public USE, recreational areas for our Village, which are ONLY currently located in the City of Dana Point neighboring areas.

Thank you for your time and consideration. PLEASE make our beautiful, eclectic, and quaint "Doheny Village Community" a TOP priority, especially in regard to whether CUSD LAND USE / Original Grant Deeds are even legal for any massive "Victoria Boulevard Apartment" project! We hope the City of Dana Point and CUSD will take our town into consideration for making it an even greater "Family, Tourist and Business Friendly" passageway for our tiny seashore village community of "DOHENY VILLAGE" …only three- and one-half blocks long!

With kindest regards,

Kathryn J. Carpenter

P.s. FYI: Steven Carpenter emailed a copy of the "Grant Deed" mentioned in my letter to Belinda Ann Deines, on August 5, 2021.

Los Angeles Times | ARTICLE COLLECTIONS

← Back to Original Article

ORANGE COUNTY FOCUS

# SAN JUAN CAPISTRANO : School Bus Parking Has District in Bind

**September 15, 1990|CHERYLANNE BEALER**

With too little space in their bus yard, officials at the Capistrano Unified School District are wrestling with a side effect of growing enrollment: Where to park 133 buses.

According to a study conducted by consultants McElligott & Associates, student ridership has increased 50% during the past five years.

More than 11,000 students will ride the bus this year, the study found.

To accommodate those students, the district maintains a lot of buses, but the 5 1/2-acre site where they park off Doheny Park Road is poorly lighted and has inadequate security, the consultants said.

Developed in the 1920s as Serra Elementary School, the site was never intended to house and service buses, Supt. Jerome Thornsley said.

The district hopes to find a new site but moving the facility any time soon won't be easy, given state regulations and expected local opposition.

**First, state law prohibits the district from selling the Capistrano Beach property outright.**

**A trade must be arranged so that no cash is exchanged.**

The district hopes to work out a trade agreement with the Dana Point Redevelopment Agency, perhaps for land near the San Juan Creek bed.

A site at one of the new schools in Aliso Viejo may also be a possibility, Thornsley said, but both those options are tentative.

And even if a trade can be worked out, relocating the bus site to a residential area would likely meet with resistance, Thornsley said.

"No one wants it in their back yard," the superintendent said.

Moreover, whatever site is selected must already be equipped as a bus or automobile storage yard, said Assistant Supt. Bill Dawson, because the district is low on cash for capital improvements.

As if all that wasn't enough, the district must also confront a competing claim to its current bus lot.

**According to Capistrano Bay Parks and Recreation District Director Dave Lewis, the bus yard was dedicated as parkland about five years ago in the county's Capistrano Beach Specific Plan.**

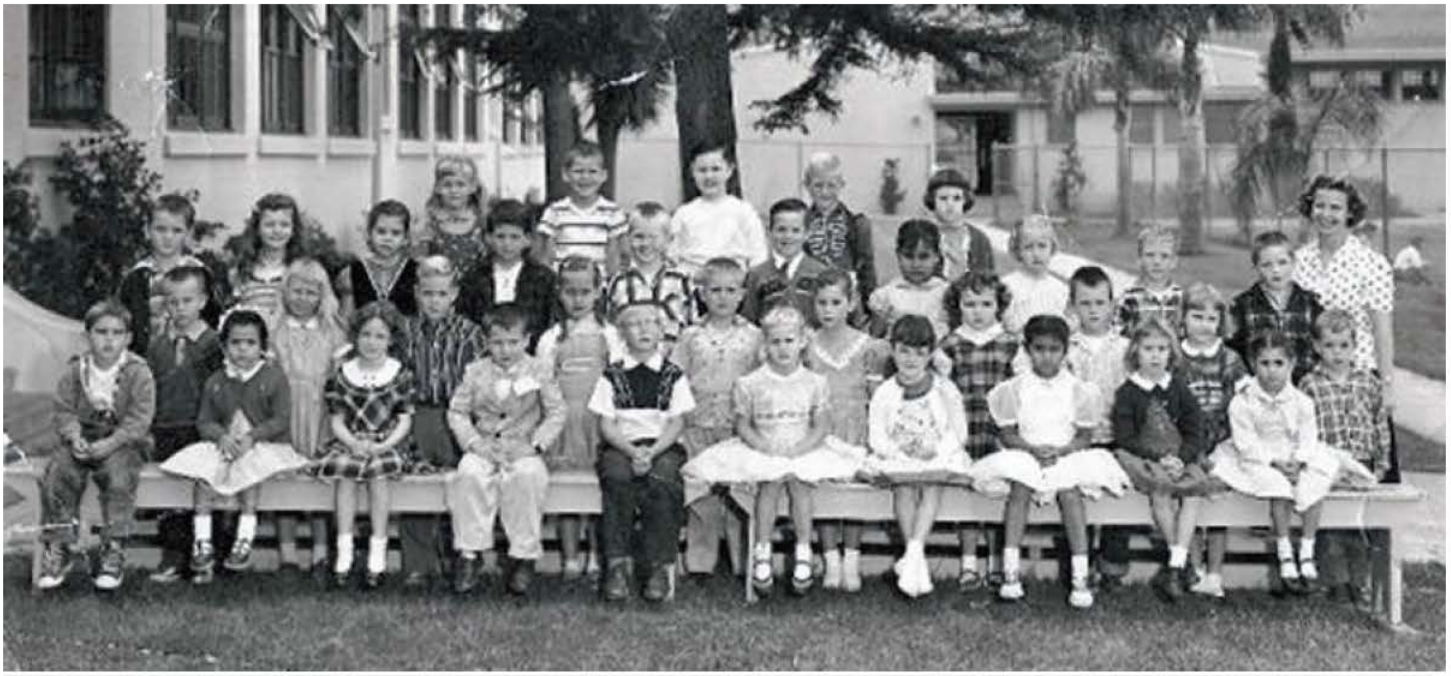
**Although that document will be superseded by the as-yet undrafted Dana Point General Plan, Lewis said having a park in the Doheny Park Business District has long been a goal of the community.**

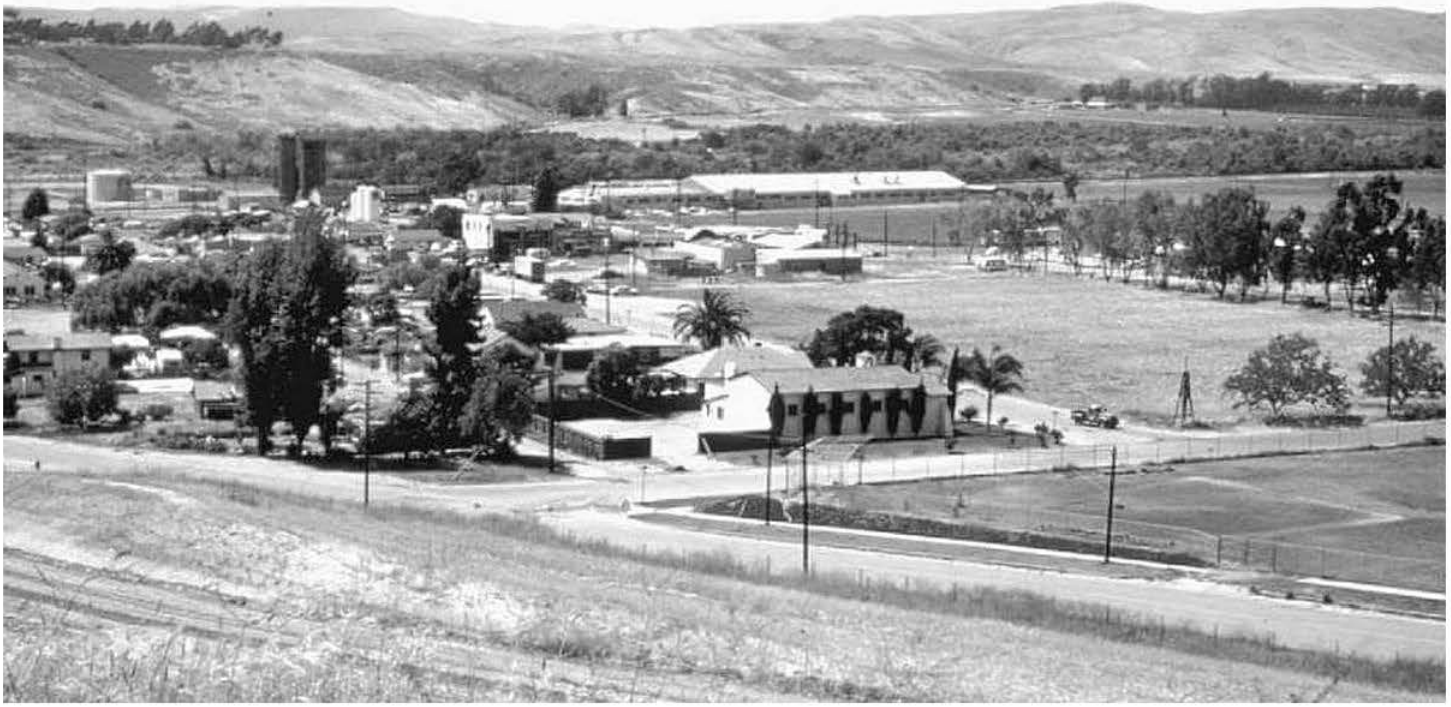
In anticipation of the tennis courts, soccer fields or senior citizens centers that could be built at the site, Lewis said the recreation district already has budgeted to buy the land, estimated at a value of $3 million.

**But Bill Dawson, assistant superintendent of the Capistrano Unified School District, disagrees that parks and recreation officials have any claim over the land.**

**"We have clear title over the site," Dawson said.**

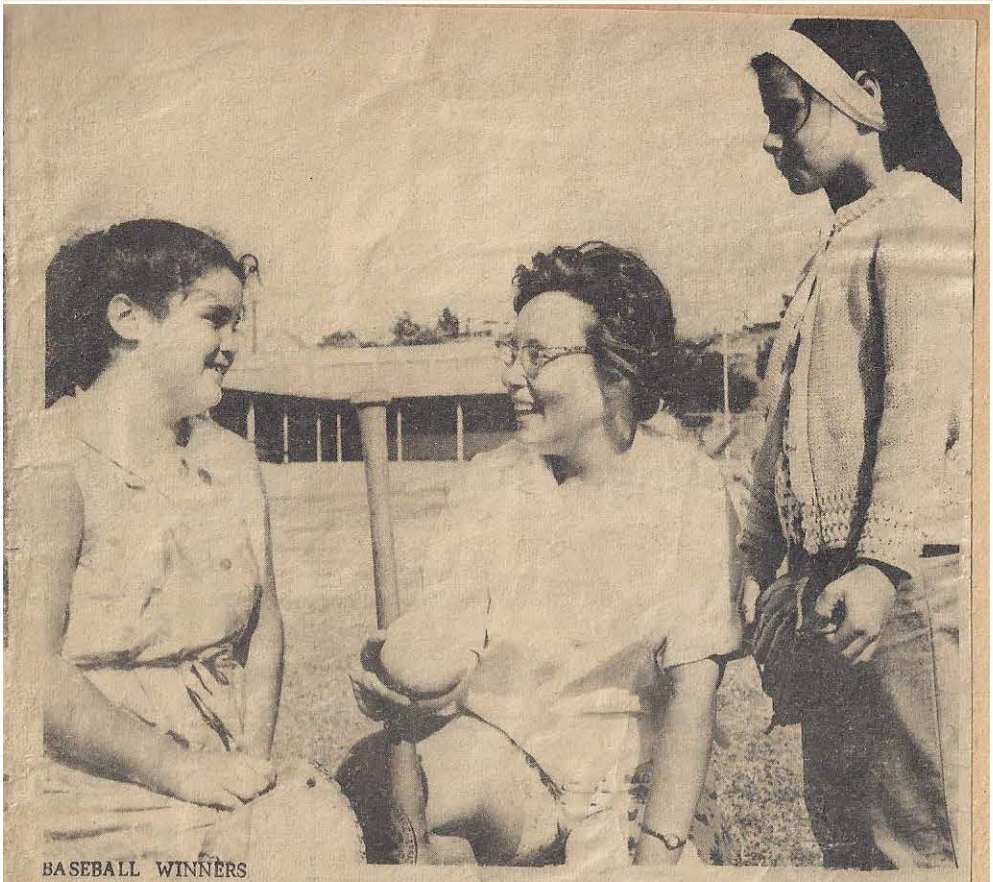
Los Angeles Times
**Copyright 2015 Los Angeles Times**







ANYTHING GOES
Recreation Director Sally Summers, center, shows a group of girls and boys in the Summer Recreation Program how to make things out of anything, including paper, old newspapers, cotton balls or what-have-you. The Arts and Crafts Section of the program is one of the most popular for children of all ages. (All Lamplighter Photos)



BASEBALL WINNERS
Coach Jackie Cooney, center, discusses strategy with two of the ace players on the Bobby-Soxers, a team of grammar school girls competing for Serra School in the Summer Recreation program. Cathy Carpenter, left, is the second baseman; Vickie Brown is first base.



**VICTORIOUS** and jubillant, the Capistrano Beach Serra Bobby Soxers are shown immediately after they captured the league championship title in a 9-8 game with San Juan on the Palisades School diamond. In front, holding rabbit mascot is Paula Williamson; middle row from left is Genie Ebargury, Kathy Carpenter, Nancy Bainbridge, Thea Williamson, Sharon Cooney and Vicki Brown. In back row from left are coach Jackie Cooney, director S. Summers, pitcher Bobbi Velardes, Suzie Mudge, Diane Smetona, Char Stockwell, Kate Tamarkin, Sandy Brown, and director J. Hopkins.

(Sun-Post Photograph)

## I74. RESPONSES TO COMMENTS FROM KATHRYN CARPENTER, MARCH 6, 2023

I74-1 The commenter provides a general introduction; it does not raise new environmental information or directly challenge information provided in the Draft EIR. For the purpose of CEQA, no further response is necessary.

I74-2 The commenter requests that the City maintain the existing land use of the project site, and states overall opposition to the project. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I74-3 The commenter raises concern over the potential traffic impacts of the project, and states that the project is not in line with the Doheny Village Plan. Refer to MR-2 regarding traffic congestion. In regard to the project's consistency with local land use designations and policies, impacts are discussed in Draft EIR Section 5.1, *Land Use and Relevant Planning* (page 5.1-1 through 5.1-33). Based on the analysis, the project is consistent with relevant General Plan policies, the Municipal Code, applicable California Coastal Act sections, the Local Coastal Program, and applicable Southern California Association of Governments goals. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I74-4 The commenter asks about the legality of CUSD leasing the project site to developers. The lease is discussed in Draft EIR Section 3.3, *Project Background and History* (page 3-7), *History of Grant Deed.* Compliance with laws regarding the disposal of surplus lands is the responsibility of CUSD. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I74-5 The commenter expresses concerns over traffic impacts related to project implementation. Refer to MR-2. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I74-6 The commenter provides concluding remarks. The comment is acknowledged.

I74-7 The commenter expresses concerns about the legality of CUSD leasing the project site to developers. Refer to response to Comment I74-4. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I74-8 The commenter expresses concerns over the availability of public recreational lands within the City and expresses an interest in alternative uses of the site for the purpose of education, parks, and recreation. Parks and recreation are discussed in the Draft EIR Section 5.13, *Public Services/Recreation and Utilities* (pages 5.13-1 through 5.13-48). The City of Dana Point maintains 28 public parks and facilities. There are a total 149 acres of City parkland, 42 acres of County of Orange parkland, and 62 acres of State parkland within the City. The City also maintains the Dana Point Community Center, which includes a community services building, organized sport leagues, and senior center. Draft EIR Table 5.13-3, *Local Area Parks* (page 5.13-4), shows ten City parks within a one-mile radius of the project area. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

COMMENT LETTER I-75

**From:** Kelly Reenders <KREENDERS@DanaPoint.org>
**Sent:** Tuesday, March 7, 2023 6:46:06 AM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Fwd: Toll Development

Kelly Reenders

Begin forwarded message:

**From:** Carol Wilson <cwilsoncapo@outlook.com>
**Date:** March 6, 2023 at 11:17:43 PM PST
**To:** Kelly Reenders <kreenders@danapoint.org>
**Subject: Toll Development**

Hello Kelly,

I hope you are the correct person to write to regarding the Toll Bros development in Capistrano Beach. If you are not, could you please pass these comments to the person who is?

My concerns with this development are as follows"

I75-1

I thought we had a 3 story limit, 35' now they can break all the rules and build this extra tall building outside the code because they are a well funded developer? This should not be allowed. What is the purpose of building codes if they only apply to some developers. This should be replanned.

This is a very small area for the amount of dwellings they are building there. They should have their own parking on site underground for 2 cars per unit plus 1 extra car for visitors. This is a tiny area with tiny streets, way to many cars for the space.

I75-2

Dana Point desperately needs affordable housing, not $4K+ per month dwellings. I own a rental in DP where a one bedroom rents for $2400 per month and those are few and far between. A person or couple would need over $8K just to move in, who has that kind of money? Local employees are desperate to find anyplace nearby to live for $2400 and that is a stretch. Greed will probably never bend to need and that is very sad.

I75-3

Carol Wilson

## I75. RESPONSES TO COMMENTS FROM CAROL WILSON, MARCH 6, 2023

I75-1 The commenter raises concern regarding the increase in the maximum height increase for the proposed project; refer to MR-6. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I75-2 The commenter raises concern regarding the parking availability for the density of dwelling units proposed; refer to MR-4. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

I75-3 The commenter raises concern regarding the availability of affordable housing. Refer to response to Comment I2-1 regarding affordable housing provisions within the Victoria Boulevard Specific Plan. Of the total unit count, a minimum of five percent very low-income, five percent low-income, and five percent moderate-income units (yielding a total of no less than 53 affordable units) are required to be provided and distributed throughout the project. The comment is acknowledged. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

**From:** Sandra Oberhauser <s.oberhauser@gmail.com>
**Sent:** Monday, March 6, 2023 9:24:32 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Subject:** Proposed Victoria Apartments

Commissioners,

We are long-time residents of Capo/Dana Point, and are very concerned about the proposed apartment project.

We do not think the EIR has taken into consideration the existing homeowners in the area above this project.
Adding 349 apartments including a six-seven level parking structure will add to noise and air pollution.The noise and air pollution will have a direct impact on the Camino Capistrano/Via Canon street area. We do not see where the EIR covered a plan for noise barriers.

In our household, we have medically fragile people who would be directly impacted with the hours of construction listed. Not to mention all the noise and pollution would diminish quality of life for people who are primarily home bound.

I76-1

Please consider noise and air pollution solutions. Noise barriers at minimum need to be added and hours of construction should not exceed 5pm.

We are against this project as it is detailed currently.

Regards,
Christopher and Sandra Oberhauser

## I76. RESPONSES TO COMMENTS FROM SANDRA OBERHAUSER, MARCH 6, 2023

I76-1 The commenter raises concern regarding noise and air quality impacts. The Draft EIR analyzed the proposed project's potential air quality and noise impacts and concludes that the project would have a less than significant impact with mitigation relative to air quality and noise. The closest sensitive receptors are residential (i.e., along Victoria Boulevard) and institutional (i.e., Orange County Fire Station No. 29, San Felipe De Jesus Catholic Church) uses located approximately 70 feet to the north and west of the project site. Any impacts to residents situated at greater distances would have less impacts from air quality emissions and noise, compared to these receptors 70 feet away. As explained in Draft EIR Section 5.8, *Air Quality* (page 5.8-14 through 5.8-23), all construction-related and operational impacts regarding air quality were found to be less than significant and no mitigation is required. As explained in Draft EIR Section 5.11, *Noise* (page 5.11-17 through 5.11-27), all construction-related and operational impacts regarding noise were found to be less than significant and no mitigation (including noise barriers) is required.

Public Comment – Victoria Boulevard Apartments Public Workshop

February 27, 2023

**Toll Brothers Apartment Living Representative – Michael McCann**

Mr. McCann introduced himself as a representative of Toll Brothers Apartment Living (TBAL). Mr. McCann acknowledged that TBAL has discussed that project with the public and understands the concerns regarding the project; Mr. McCann acknowledged that a traffic study was prepared for the proposed project to analyze the project's additional trips on the local roadways. A parking study was also prepared that shows that the project is overparked based on existing City parking standards. IPW-1

TBAL acknowledged that the public requested lower heights, particularly along Victoria Boulevard. As such, Toll Brothers accommodated this request with a step up toward the center of the site.

Mr. McCann acknowledged that the proposed density is consistent with the Doheny Village. This is in consideration of the State allowed density bonus and proposed affordable housing on-site.

TBAL also wanted to highlight the proposed on-site half-acre public park.

**Brent Newmyer - Resident**

Mr. Newmyer provided the Planning Commission members with ground level views that he prepared based on the Public Review Draft EIR. Mr. Newmyer stated that the proposed project is very different from the surrounding community. He expressed concerns about building height and massing, which he believes is not appropriate for the existing surrounding community. In particular, he was concerned about views of the project from along Domingo Avenue. Mr. Newmyer also expressed concern about increased traffic. IPW-2

Refer to Attachment A for handout of rendering provided.

**Jim Schat - Resident**

Mr. Schat stated that he is not in favor of the project. He believes that the project is too big and the resulting negative impacts are not worth it. Mr. Schat recommends that the Planning Commissioners should look at the build alternative considered as part of the Draft EIR, which is consistent with the recently adopted Dohney Village Plan for the community. In his opinion, the project as currently proposed is too dense. He was also concerned about what he felt was the lack of input solicited from the Doheny Village Working Group. IPW-3

**Rick Morgan – Resident**

Mr. Marvin believes that the project is too dense for the area. He is also concerned about the increased traffic for the roads. IPW-4

**Larry Robinson - Resident**

Mr. Robinson stated that the project should be scaled back. Mr. Robinson was a member of the Doheny Village Working Group. It was the intention of the Working Group to maintain certain standards, which was approved by The Village Plan. The project's proposed density should match The Village Plan. IPW-5

Refer to Attachment B for handout provided.

**Steven Carpenter – resident**

Mr. Carpenter commented that the proposed project is too dense for the area and this would increase too much traffic on Victoria Boulevard. He stated the intent of the Doheny Village Working Group was a 114 unit development on the site. IPW-6

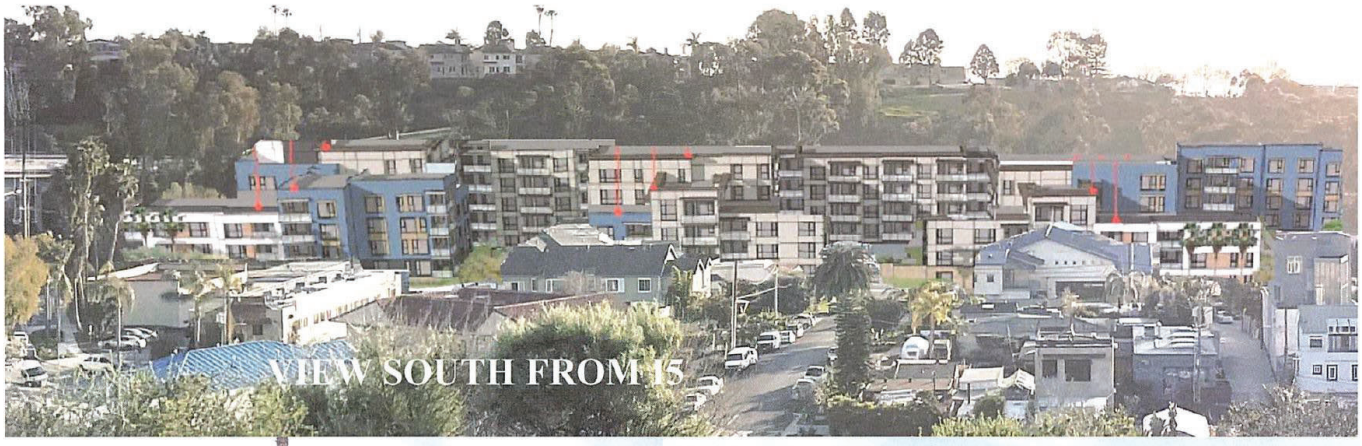
**Linda Black – Resident**

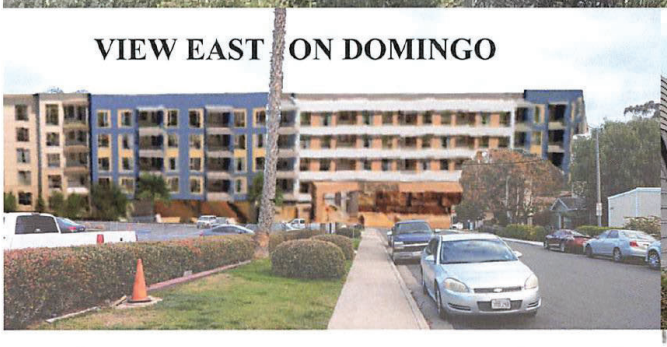
Ms. Black believes this project is too dense. She does not believe the proposed park would be a public benefit. Ms. Black is concerned about traffic and emergency access. IPW-7

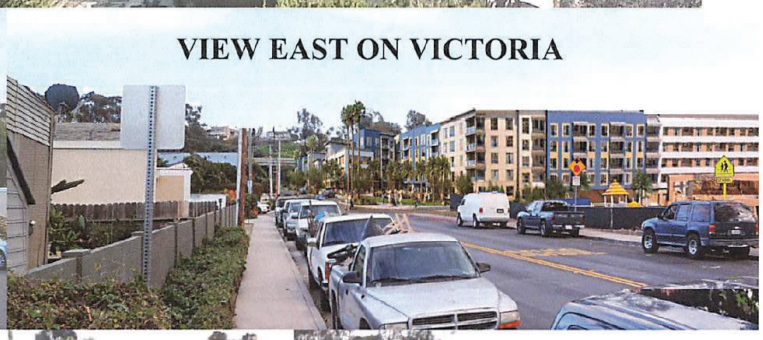
**Debbie Miller – Resident**

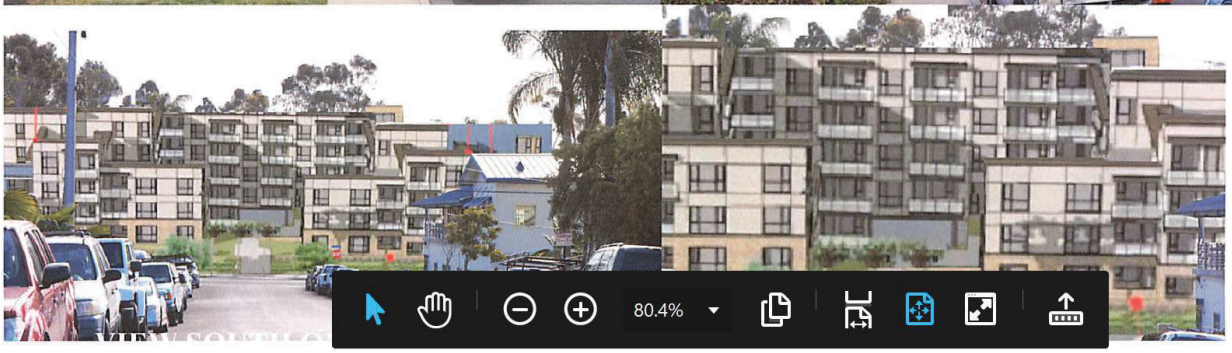
Ms. Miller commented that the project is too dense and too high. She believes that this project is invasive for Capo Beach residents. IPW-8

**Attachment A – Brent Newmyer - Resident**



Prepared by

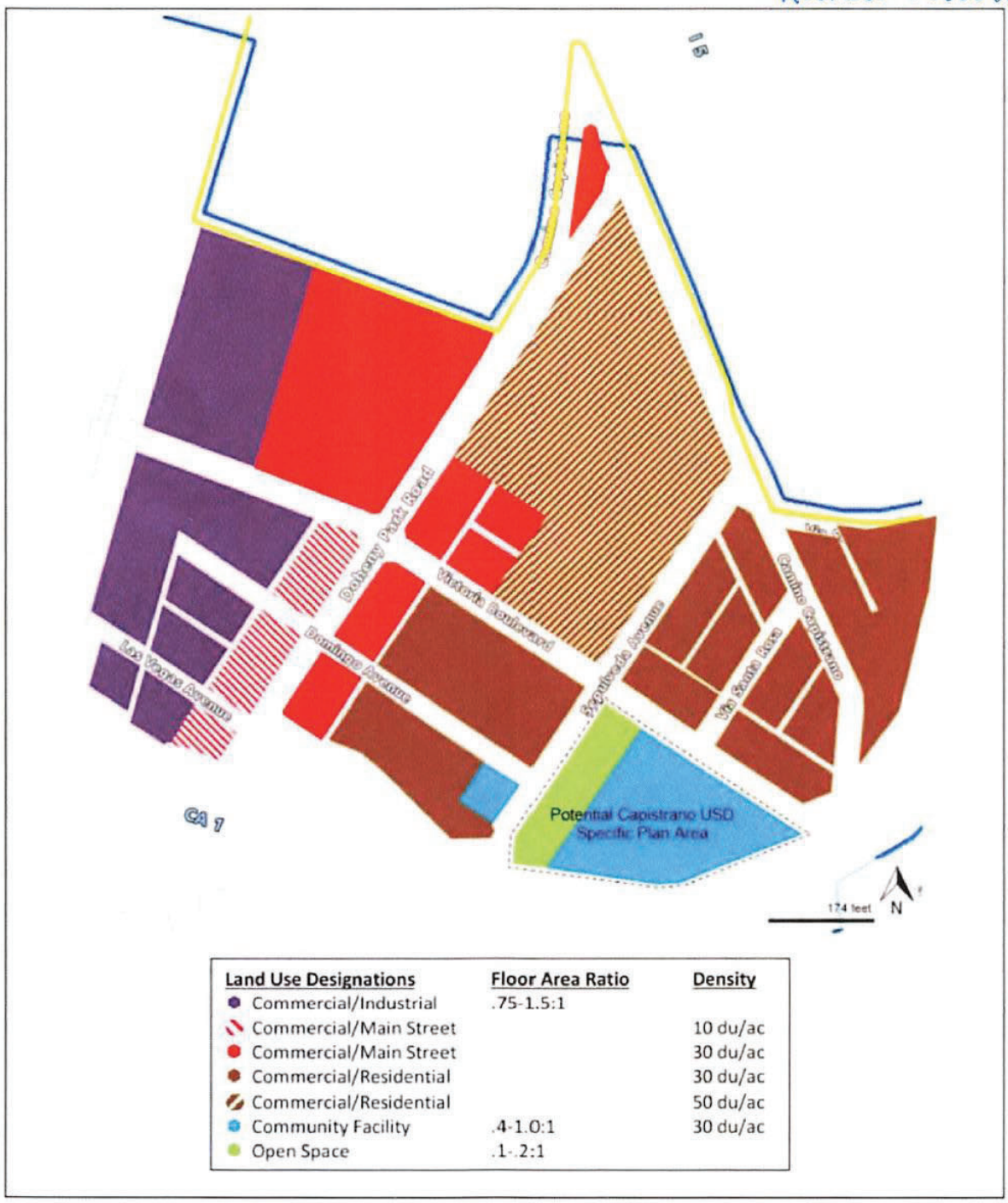
Brent Neumeyer
34731 Calle Las Flores
Capistrano Beach
Contact:
neumeyerr@cox.net
949-240-1332

80.4%

**Attachment B – Larry Robinson - Resident**

## Attachment 5 – Draft EIR: Page 64:

2/21/23
ROBINSON PUBLIC COMMENT




| Land Use Designations | Floor Area Ratio | Density |
|---|---|---|
| Commercial/Industrial | .75-1.5:1 | |
| Commercial/Main Street | | 10 du/ac |
| Commercial/Main Street | | 30 du/ac |
| Commercial/Residential | | 30 du/ac |
| Commercial/Residential | | 50 du/ac |
| Community Facility | .4-1.0:1 | 30 du/ac |
| Open Space | .1-.2:1 | |

Michael Baker INTERNATIONAL

DOHENY VILLAGE ZONING DISTRICT UPDATE PROJECT
ENVIRONMENTAL IMPACT REPORT

**Doheny Village Land Use Designations**

Exhibit 3-7

## I-PW. RESPONSES TO COMMENTS FROM FEBRUARY 7, 2023 PUBLIC WORKSHOP

IPW-1 The Applicant representative commented on the proposed project and public outreach discussions with the public. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project.. For the purpose of CEQA, no further response is necessary.

IPW-2 The commenter expressed concerns regarding the proposed building height and massing; refer to MR-6.

IPW-3 The commenter is opposed to the project and favors the build alternative identified in the Draft EIR. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

IPW-4 The commenter is concerned with density and traffic. Refer to MR-2 pertaining to traffic and MR-5 regarding project density.

IPW-5 The commenter is concerned with density and opines that the proposed density should be consistent with the surrounding zoning associated with the Doheny Village Plan. Refer to MR-5 regarding project density. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

IPW-6 The commenter is concerned with density and traffic and opines that the proposed density should be consistent with the surrounding zoning associated with the Doheny Village Plan.

Refer to MR-2 pertaining to traffic; refer to MR-5 regarding project density. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

IPW-7 The commenter is concerned the project is too dense and expresses concerns regarding traffic and emergency access. Refer to MR-2 pertaining to traffic; refer to MR-5 regarding project density. As discussed in Draft EIR Section 5.7, *Transportation* (page 5.7-17), project site plans would be subject to review by the City and OCFA to ensure that adequate emergency access and emergency response is provided and that the project complies with fire and emergency access standards and requirements. Further, as analyzed under Impact Statements TRA-3 and TRA-4 of Draft EIR Section 5.7, (page 5.7-12 through 5.7-17), potential impacts from temporary closures of vehicle lanes, bicycle lanes, and/or sidewalks from construction activities would be mitigated by Mitigation Measure TRA-1. Mitigation Measure TRA-1 would require the Applicant (Developer) to coordinate with the Director of Public Works regarding timing and duration of proposed temporary partial lane and/or sidewalk closures to ensure the closures would not impact operations of adjacent uses or emergency access.

IPW-8 The commenter is concerned the project is too dense and invasive for surrounding residents. Refer to MR-5 regarding project density. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

# Letters Received After the Close of the Public Review Period

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COMMENT LETTER L-01

RECEIVED

MAR 07 2023

CITY OF DANA POINT
COMMUNITY DEVELOPMENT
DEPARTMENT

To whom it may concern:

I am a Duplex owner in Capistrano Beach residing at 34204 Sepulveda Ave, while 34206 is my adjoining rental property. This letter is in response to the EIR regarding the Toll Brothers proposed project at Victoria Blvd. in Capistrano Beach. I first would like to thank Belinda Deines for her diligent efforts and years of commitment listening to local residents about their cares and concerns for this special place where we all live and work, I have since seen positive changes in the Doheny Village and look forward to many more in the near future, this Toll Brothers project is NOT one of them, it would simply throw a wrench in the spokes of what we have been working toward, and would change this area in a negative way forever.I relocated here from San Luis Obispo, Ca. to Laguna Niguel, where i found myself surrounded by stucco boxes with fake shutters stapled to the side, 4 different floor plans and traffic, it was not my vibe at all, I wen't driving around looking for something that was, I remembered attending a concert at Capo Beach Church in Capistrano Beach and how that area had what I was looking for,I found a place that wasn't ready to move into and was larger than what i needed, but I had to live there! I rented the space and was able to move into the garage until the space was ready to rent, i moved in and learned that surf legend Tom Morey was my next door neighbor, i lived there for several years and was able to purchase the property in 2004 from Kathy Carpenter, her father Ross Carpenter designed and built this duplex and it is extraordinary, like the area he chose to build it in. I intend to carry on his legacy. I was formerly part of the team @ Swift Engineering in San Clemente that designed and constructed Indy race cars for Michael Andretti, Christian Fittipaldi, Robby Gordon etc...One very important thing that I learned is that EVERY component on the racecar fits correctly and performs a specific function. This Toll Brothers proposed project would be like putting a John Deere tractor tire on Michael Andretti's Indycar, you just don't do that! it does NOT fit the intended design of this unique and beautiful community and should not be considered for this location, there are plenty of places on this planet where this plan may work, but this is not one of them. I have seen some of the underground manipulations , re-writing of codes, and other schemes to get this project done, the Constitution was written for a reason, and certain codes should not be re-written, re-worded, moved through before anyone noticed..etc , I have since left a career @ SWIFT engineering and since 1999 have been operating Whitworth Design my design, fabrication, and working gallery at 34204 Sepulveda Ave. in Capistrano Beach,I intend to do that, if this project passes I will move to another area that fits my vibe...

L1-1

## L1. RESPONSES TO COMMENTS FROM WHITWORTH, MARCH 7, 2023

L1-1 The commenter generally raises concerns regarding aesthetic impacts and the project's cohesiveness with the community. Refer to MR-6. .

**From:** Melinda Matranga <melindawm1@gmail.com>
**Sent:** Tuesday, March 7, 2023 8:59 PM
**To:** Belinda Deines <BDeines@DanaPoint.org>
**Cc:** Douglas Matranga <dougm49@cox.net>
**Subject:** Toll apartments in the bus yard

Hello, Belinda. When Douglas and I spoke with you at the Dana Point Planning Commission meeting in February, we expressed our concern about the Toll Brothers Apartments bringing more overcrowding to the city. Unfortunately, we are out of town next Monday when the next DPPC meeting is being held. Is it still open for discussion even though I don't see the apartments on the agenda? If other concerned citizens want to voice their opinions, would they just show up on the 13th at 6:00? I would like to send an email expressing my concerns. Should I send it to the planning commission members and the city council? Would you kindly attach an information handout on the proposed number of apartments being requested (versus the zoning limits), parking, number of stories, etc. or tell me where I can locate it? Thank you for your time. Melinda Matranga

L2-1

## L2. RESPONSES TO COMMENTS FROM MELINDA MATRANGA, MARCH 7, 2023

L2-1 The commenter asks for clarification on details of public review, specifically whether the project will be open for discussion at the Dana Point Planning Commission meeting on March 13, 2023. The City will notify the public pursuant to Municipal Code requirements for a public hearing.

The commenter also asks for information on the proposed number of apartments being requested, parking, and the number of stories in the buildings. Refer to MR-4 pertaining to parking.

COMMENT LETTER L-03

From: Karla Carroll <karlajcarroll@gmail.com>
Sent: Thursday, March 9, 2023 6:26 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Victoria Boulevard Apartments

Hi Belinda,

I wanted to share with you my positive thoughts and blessings for the approval of the Victoria Boulevard proposed apartment project. As a long time area residence I feel the proposed project will have a positive impact on the area and feel it's a vast improvement over the current land-use.

L3-1

I urge the city to approve the proposed project.

Thank You

Karla J Carroll

## L3. RESPONSES TO COMMENTS FROM KARLA CARROLL, MARCH 9, 2023

L3-1 The commenter expresses support for the proposed project. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

From: Robert Mc Cumsey <Dr_Sushi@outlook.com>
Sent: Thursday, March 9, 2023 6:42 AM
To: Belinda Deines <BDeines@DanaPoint.org>
Subject: Proposed Capo Beach Apartments

Belinda,
I've lived within the fine area of South County Dana Point all my life, that being said I can truly say the proposed apartment community on the old school district bus yard is a welcomed improvement. Please share my family's approval for the proposed project. L4-1

Thank you for your community service.

Dr. Sushi

## L4. RESPONSES TO COMMENTS FROM ROBERT MC CUMSEY, MARCH 9, 2023

L4-1 The commenter expresses support for the proposed project. This comment is acknowledged. The commenter does not raise new environmental information or directly challenge information provided in the Draft EIR. The decision whether to approve the project is ultimately a policy and legislative decision of the City Council (based on a recommendation received from the Planning Commission). The Draft EIR is created to identify and inform the Planning Commission and the City Council of the environmental impacts of that decision before it is made, so that it is fully informed. To that end, while the commenter does not raise new environmental information or directly challenge information provided in the Draft EIR, the City of Dana Point decision makers will consider all comments on the proposed project. For the purpose of CEQA, no further response is necessary.

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# 4.0 Errata

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# 4.0 ERRATA

Changes to the Draft Environmental Impact Report (Draft EIR) are noted below. A double-underline indicates additions to the text; ~~strikethrough~~ indicates deletions to the text. Changes have been analyzed and responded to in Section 2.0, *Response to Comments*. The changes to the Draft EIR do not affect the overall conclusions of the environmental document. Changes are listed by page and, where appropriate, by paragraph.

These errata address the technical comments on the Draft EIR, which circulated from January 20, 2023 through March 6, 2023. These clarifications and modifications are not considered to result in any new or substantially greater significant impacts as compared to those identified in the Draft EIR. Any changes referenced to mitigation measures contained in the Draft EIR text also apply to Section 1.0, *Executive Summary*, and Section 5.0, *Environmental Analysis*, of the Draft EIR. All mitigation measure modifications have been reflected in Section 4.0, *Mitigation Monitoring and Reporting Program*, of this Final EIR.

## SECTION 5.7, TRANSPORTATION

### Section 5.7.4, Impacts and Mitigation Measures

### TRANSIT FACILITIES

As stated above, the project area is currently served by OCTA Route 1 along Pacific Coast Highway/Camino Capistrano, as well as Route 91 along Pacific Coast Highway/Del Obispo Street. ~~Bus stops for Route 1 are located on Victoria Avenue at the intersections of Via Santa Rosa and Sepulveda Avenue.~~

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# 5.0 Mitigation Monitoring and Reporting Program

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# 5.0 MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) requires that when a public agency completes an environmental document which includes measures to mitigate or avoid significant environmental effects, the public agency must adopt a reporting or monitoring program. This requirement ensures that environmental impacts found to be significant will be mitigated. The reporting or monitoring program must be designed to ensure compliance during project implementation (Public Resources Code Section 21081.6).

In compliance with Public Resources Code Section 21081.6, Table 4-1, *Mitigation Monitoring and Reporting Checklist*, has been prepared for the Victoria Boulevard Apartments Project (project). This Mitigation Monitoring and Reporting Checklist is intended to provide verification that all applicable mitigation measures and standard conditions relative to significant environmental impacts are monitored and reported. Monitoring will include: 1) verification that each mitigation measure/standard condition has been implemented; 2) recordation of the actions taken to implement each mitigation measure/standard condition; and 3) retention of records in the City of Dana Point Victoria Boulevard Apartments Project file.

This Mitigation Monitoring and Reporting Program (MMRP) delineates responsibilities for monitoring the project, but also allows the City of Dana Point (City) flexibility and discretion in determining how best to monitor implementation. Monitoring procedures will vary according to the type of mitigation measure or standard condition. Adequate monitoring consists of demonstrating that monitoring procedures took place and that mitigation measures/standard conditions were implemented. This includes the review of all monitoring reports, enforcement actions, and document disposition, unless otherwise noted in the Mitigation Monitoring and Reporting Checklist (Table 4-1). If an adopted mitigation measure or standard condition is not being properly implemented, the designated monitoring personnel shall require corrective actions to ensure adequate implementation.

Reporting consists of establishing a record that a mitigation measure or standard condition is being implemented, and generally involves the following steps:

- The City distributes reporting forms to the appropriate entities for verification of compliance.
- Departments/agencies with reporting responsibilities will review the Draft EIR and Final EIR, which provide general background information on the reasons for including specified mitigation measures/standard conditions.
- Problems or exceptions to compliance will be addressed to the City as appropriate.
- Periodic meetings may be held during project implementation to report on compliance of mitigation measures/standard conditions.
- Responsible parties provide the City with verification that monitoring has been conducted and ensure, as applicable, that mitigation measures/standard conditions have been implemented.

Monitoring compliance may be documented through existing review and approval programs such as field inspection reports and plan review.

- The City prepares a reporting form periodically during the construction phase and an annual report summarizing all project mitigation monitoring efforts.

- Appropriate mitigation measures and standard conditions will be included in construction documents and/or conditions of permits/approvals.

Minor changes to the MMRP, if required, would be made in accordance with CEQA and would be permitted after further review and approval by the City. No change will be permitted unless the MMRP continues to satisfy the requirements of Public Resources Code Section 21081.6.

The following subsections of the Draft EIR contain detailed environmental analyses of the existing conditions, project impacts (including direct and indirect, short-term, long-term, and cumulative impacts), recommended mitigation measures and standard conditions, and significant unavoidable impacts, if any.

Based on the Draft EIR, no significant impacts would occur in regard to the following environmental issue areas, which are addressed in Draft EIR Section 8.0, *Effects Found Not To Be Significant*:

- Agriculture and Forestry Resources;
- Biological Resources;
- Mineral Resources; and
- Wildfire.

In accordance with Appendix G of the *CEQA Guidelines*, the following environmental issue areas were determined in the Initial Study to have a potentially significant impact, and have been included within the Draft EIR for further analysis:

- Land Use and Relevant Planning;
- Aesthetics/Light and Glare;
- Tribal and Cultural Resources;
- Geology and Soils;
- Hydrology and Water Quality;
- Hazards and Hazardous Materials;
- Transportation;
- Air Quality;
- Greenhouse Gas Emissions;
- Energy;
- Noise;
- Population and Housing; and
- Public Services/Recreation and Utilities.

For the purposes of the environmental analysis in the Draft EIR, impacts were analyzed in each environmental issue area for the proposed project. If necessary, mitigation measures and/or standard conditions were recommended in order to reduce any significant impacts.

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## Table 5-1
## Mitigation Monitoring and Reporting Checklist

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Initials | Date | Remarks |
| **Cultural Resources** | | | | | | | | |
| CUL-1 | Unanticipated Discovery of Cultural Resources. The project Applicant shall retain a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology to conduct Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural resources that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and the archaeologist shall evaluate the find. If the resources are Native American human remains, the County Coroner and the Native American Heritage Commission shall be contacted as mandated by law. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources (CRHR) eligibility. The treatment plan shall be reviewed and approved by the qualified archaeologist. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery excavation, and, if so, shall be identified by the archaeologist to mitigate any such significant impacts to cultural resources, if identified. | Qualified Archaeologist; Construction Contractor | Prior to Ground-Disturbing Activities; During Grading Activities | City Planning Division | Prior to Ground-Disturbing Activities | | | |
| **Geology and Soils** | | | | | | | | |

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Initials | Date | Remarks |
| GEO-1 | Prior to issuance of grading permits, the project Applicant shall provide a technical paleontological assessment prepared by a qualified paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology (SVP) standards for a Principal Investigator or Project Paleontologist, assessing the sensitivity of the project site for buried paleontological resources to the City of Dana Point Planning Division for review and approval.<br><br>If resources are known or reasonably anticipated, the assessment shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of the qualified paleontologist. The mitigation plan shall include, but not be limited to, the following:<br><br>• A qualified paleontologist shall be retained for the project and shall be on call during grading and other significant ground-disturbing activities;<br><br>• Should any potentially significant fossil resources be discovered, no further grading shall occur in the area of the discovery until the qualified paleontologist and City of Dana Point Planning Division concurs in writing that adequate provisions are in place to protect these resources; and<br><br>• Unanticipated discoveries shall be evaluated for significance by the qualified paleontologist. If a resource is determined to be significant by the qualified paleontologist, the resource shall be collected and catalogued in accordance with SVP guidelines and adequately curated in an institution with appropriate staff and facilities. | Applicant; Qualified Paleontologist | Prior to Issuance of Grading Permits; During Grading Activities | City Planning Division | Prior to Issuance of Grading Permits | | | |

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Initials | Date | Remarks |
| | A report of findings with an itemized accession inventory shall be prepared as evidence that monitoring has been successfully completed and shall be submitted and approved by the City of Dana Point Planning Division prior to the granting of occupancy permits. | | | | | | | |
| **Hazards and Hazardous Materials** | | | | | | | | |
| HAZ-1 | On-site Features Removal. Prior to issuance of grading permits, the project Applicant shall retain a qualified environmental professional with Phase II/Site Characterization experience to remove numerous features remaining on-site, including but not limited to the hydraulic lifts, hydraulic fluid reservoir and associated piping, and the bus wash clarifier. Impacted soil identified during the removal of these features shall be removed and handled according to the Soil Management Plan (Mitigation Measure HAZ-2). Confirmation soil samples shall be collected within the excavated areas. Removal activities shall adhere to applicable federal, State, and local regulations, and shall occur under supervision of the Orange County Health Care Agency and/or other relevant agencies. | Applicant; Qualified Environmental Professional with Phase II/Site Characterization experience | Prior to Issuance of Grading Permit | Director of Public Works; Orange County Health Care Agency and/or Other Relevant Agencies | Prior to Issuance of Grading Permit; During Construction | | | |
| HAZ-2 | Soil Management Plan. Prior to issuance of a grading permit, a Soil Management Plan (SMP) shall be prepared by a qualified environmental professional with Phase II/Site Characterization experience. The SMP shall include guidelines for safety measures and soil management in the event that soils are to be disturbed, and for handling soil during any planned earthwork activities. The SMP shall also include a decision framework and specific risk management measures for managing soil, including any soil import/export activities, in a manner protective of human health and consistent with applicable regulatory requirements. The SMP shall be submitted to, reviewed, and approved by the Director of Public Works prior to issuance of grading permit. Upon approval, the SMP shall be made available to the contractor and the Director of Public Works for use during grading activities. | Qualified Environmental Professional with Phase II/Site Characterization experience | Prior to Issuance of Grading Permit | Director of Public Works; | Prior to Issuance of Grading Permit; During Construction | | | |

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
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| | | | | | | Initials | Date | Remarks |
| HAZ-3 | Remediation for Shallow Soil. Prior to initiation of grading activities, the project Applicant shall retain a qualified environmental professional with Phase II/Site Characterization experience to conduct shallow soil remediation in the vicinity of the grounds dispatch building. Visually impacted soil in the vicinity of the grounds dispatch building shall be removed to an adequate depth as determined by the specialist. Confirmation soil samples from excavation walls and floor shall be collected and analyzed. Remedial activities shall adhere to applicable federal, State, and local regulations, and under supervision of the Orange County Health Care Agency, San Diego Regional Water Quality Control Board, and/or other relevant agencies, as applicable. | Applicant; Qualified Environmental Professional with Phase II/Site Characterization experience | Prior to Initiation of Grading Activities | Director of Public Works; Orange County Health Care Agency; San Diego Regional Water Quality Control Board; and/or Other Relevant Agencies | Prior to Initiation of Grading Activities | | | |
| HAZ-4 | Additional Verification Sampling. Upon completion of building demolition and prior to and during site grading, the project Applicant shall retain a qualified environmental professional with Phase II/Site Characterization experience to conduct verification soil gas sampling(s) in the vicinity of the grounds dispatch building and mechanic shop. Should any samples determine that residual contamination in either soil or soil gas exceed the thresholds for residential use (i.e., the Department of Toxic Substances Control modified screening levels [DTSC-SL] of 83 µg/m3 for naphthalene, and DTSC-SL of 460 µg/m3 for PCE, or otherwise specified by the oversight agency), the project Applicant shall install vapor barrier(s), if determined necessary, prior to construction of the on-site building foundation | Applicant; Qualified Environmental Professional with Phase II/Site Characterization experience | Completion of Building Demolition; Prior to and During Site Grading | Director of Public Works | Completion of Building Demolition; Prior to and During Site Grading | | | |
| HAZ-5 | Monitoring Well Deconstruction. Prior to issuance of grading permits, the project Applicant shall obtain a monitoring well deconstruction permit from Orange County Health Care Agency and/or the Regional Water Quality Control Board. Upon receipt of the monitoring well deconstruction permit, the project Applicant shall obtain a qualified environmental professional with Phase II/Site Characterization experience to properly seal and abandon the existing monitoring well | Applicant; Qualified Environmental Professional with Phase II/Site Characterization experience | Prior to Issuance of Grading Permits | Director of Public Works | Prior to Issuance of Grading Permits; During Construction | | | |

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
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| | (MW1) on-site in accordance with the existing laws and regulations. | | | | | | | |
| HAZ-6 | Asbestos/Lead-Based Paint Surveys. Prior to demolition of existing structures (including piping materials), the project Applicant shall retain a qualified specialists or contractor to conduct surveys of ACM, LBP, and universal waste and submitted to the City Director of Public Works for approval. If ACMs are located, abatement of asbestos shall be completed prior to any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403. If LBPs are found, abatement shall be completed by a qualified Lead Specialist prior to any activities that would create lead dust or fume hazard. LBP removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Specialists or contractors performing ACM, LBP, and/or universal waste removal shall provide evidence of abatement activities to the City Director of Public Works, if applicable. The project Applicant shall inform the Director of Public Works, via the monthly compliance report, of the date when all ACMs, LBPs, and universal waste are removed from the site, if applicable. | Applicant; Qualified Asbestos/Lead Specialist(s) or Contractor | Prior to Demolition of Existing Structures | Director of Public Works | Prior to and During Demolition of Existing Structures | | | |
| HAZ-7 | Unknown Waste. Prior to initiation of construction activities, contractor shall establish procedures in the event that unknown wastes or contamination source or indicator are encountered during construction. Observations shall be made during project construction for potential contamination source or indicator such as, but not limited to, the presence of underground facilities, buried debris, waste drum tanks, and stained or odorous soils. If unknown wastes or suspect | Construction Contractor | Prior to Initiation of Construction Activities | Director of Public Works | During Project Construction | | | |

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| | materials are discovered during construction, the contractor shall comply with the following:<br><br>• Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area;<br>• Notify the Director of Public Works;<br>• Secure the area as directed by the Director of Public Works; and<br>• Notify the implementing agency's Hazardous Waste/Materials Coordinator. The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required. | | | | | | | |
| **Transportation** | | | | | | | | |
| TRA-1 | Prior to issuance of any grading and/or demolition permits, whichever occurs first, the Applicant (Developer) shall prepare a Construction Management Plan (CMP) to be submitted for review and approval by the City of Dana Point Director of Public Works. The requirement for a CMP shall be incorporated into the Project specifications and subject to verification by the Director of Public Works prior to final plan approval. The CMP shall include, at a minimum, the following measures, which shall be implemented during all construction activities as overseen by the Construction Contractor:<br><br>• Meet the standards established in the current California Manual on Uniform Traffic Control Device (MUTCD) as well as City of Dana Point requirements. The CMP shall be prepared by the contractor and submitted to the Director of Public Works for approval pertaining to off-site work, including sidewalk construction, building façade, underground utilities, and any work that would require temporary curb lane closures. The plan | Applicant | Prior to Issuance of Any Grading and/or Demolition Permits | Director of Public Works | Prior to Issuance of Any Grading and/or Demolition Permits; During Construction | | | |

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| | shall be developed according to the MUTCD (latest edition) guidelines, including plans for traffic signs, traffic cone arrangements, and flaggers to assist with pedestrian and traffic.<br><br>• Submit the CMP to the California Department of Transportation (Caltrans) and City of San Juan Capistrano for review and comment, prior to approval by the Director of Public Works, should construction hauling utilize facilities within these jurisdictions.<br><br>• Identify traffic control for any street closure, detour, or other disruption to traffic circulation, including the necessary traffic controls to allow for construction-related traffic to enter and exit the site.<br><br>• Should project construction activities require temporary vehicle lane, bicycle lane, and/or sidewalk closures, the Applicant (Developer) shall coordinate with the Director of Public Works regarding timing and duration of proposed temporary lane and/or sidewalk closures to ensure the closures do not impact operations of adjacent uses or emergency access.<br><br>• Identify the routes that construction vehicles must utilize for the delivery of construction materials (i.e., lumber, tiles, piping, windows, etc.), to access the site, traffic controls and detours, and proposed construction phasing plan for the project.<br><br>• Specify all grading and equipment operations shall not be conducted between the hours of 8:00 | | | | | | | |

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| | p.m. and 7:00 a.m. Monday through Saturday, and/or any time on Sunday or a Federal holiday, pursuant to Section 11.10.014, Special Provisions, of the Dana Point Municipal Code.<br><br>• Should project construction activities occur during general drop-off and pick-up hours for nearby schools (i.e., Nobis Preschool), traffic signs, traffic cone arrangements, and flaggers shall assist with ensuring safe pedestrian access along the project frontage for students.<br><br>• Require the Applicant (Developer) to keep all haul routes clean and free of debris including, but not limited to, gravel and dirt, as a result of its operations. The Applicant (Developer) shall clean adjacent streets, as directed by the Director of Public Works, of any material which may have been spilled, tracked, or blown onto adjacent streets or areas.<br><br>• All construction-related parking and staging of vehicles shall be kept out of the adjacent public roadways and shall occur on-site.<br><br>• Traffic controls shall be implemented for any street closure, detour, or other disruption to traffic circulation and shall maintain emergency access to the site. | | | | | | | |
| **Noise** | | | | | | | | |
| SC NOI-1 | The Construction Contractor shall implement the following measures to reduce construction-related noise impacts:<br><br>• Ensure all construction equipment is equipped with properly operating and maintained mufflers (which would result in a sound reduction of 5 | Construction Contractor | During Construction | City Planning Division | During Construction | | | |

| Mitigation Number | Mitigation Measure | Implementation Responsibility | Timing | Monitoring Responsibility | Timing | VERIFICATION OF COMPLIANCE | | |
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| | dBA);<br>• Use temporary walls or noise barriers at the discretion of the Director of Public Works to block and deflect noise to ensure a sound reduction of up to 20 dBA;<br>• Locate stationary construction equipment so that emitted noise is directed away from the nearest noise sensitive receptors,<br>• Locate equipment staging in areas furthest away from sensitive receptors, and<br>• Limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday). | | | | | | | |
| **Public Services** | | | | | | | | |
| SC PS-1 | The project Applicant shall enter into a Secured Fire Protection Agreement with the Orange County Fire Authority (OCFA). The agreement shall specify the Applicant's pro-rata fair share funding of capital improvements necessary to establish adequate fire protection facilities and equipment, and/or personnel at the discretion of OCFA. | Applicant | Prior to Issuance of Grading Permit | City Planning Division | Prior to Issuance of Grading Permits | | | |