

Initial Study

Rise Residence at 3550 East Cameron Avenue

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TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 Introduction.....	1-1
1.1 Purpose of the Initial Study	1-1
1.2 Project Summary	1-1
1.2.1 Location	1-1
1.2.2 Project Proponent.....	1-1
1.2.3 Existing General Plan and Zoning	1-1
1.2.4 Existing Setting.....	1-2
1.2.5 Proposed Project.....	1-2
1.3 Organization of the Initial Study.....	1-2
2.0 Project Description.....	2-1
2.1 Project Land Use	2-1
2.2 Project Access/Parking.....	2-1
2.3 Construction Activities.....	2-1
2.4 Discretionary Approvals.....	2-1
3.0 Environmental Checklist	3-1
3.1 Aesthetics	3-3
3.2 Agriculture and Forest Resources.....	3-7
3.3 Air Quality	3-9
3.4 Biological Resources	3-24
3.5 Cultural Resources	3-27
3.6 Energy	3-29
3.7 Geology and Soils.....	3-33
3.8 Greenhouse Gas Emissions	3-38
3.9 Hazards and Hazardous Materials.....	3-46
3.10 Hydrology and Water Quality.....	3-50
3.11 Land Use and Planning.....	3-55
3.12 Mineral Resources.....	3-59
3.13 Noise.....	3-60
3.14 Population and Housing.....	3-70
3.15 Public Services.....	3-72
3.16 Recreation	3-74

3.17	Transportation	3-75
3.18	Tribal Cultural Resources.....	3-78
3.19	Utilities and Service Systems	3-80
3.20	Wildfire.....	3-85
3.21	Mandatory Findings of Significance	3-86
4.0	References	4-1

TABLES

<u>Table</u>	<u>Page</u>
Table 3-1 South Coast Air Quality Management District Air Quality Significance Thresholds.....	3-11
Table 3-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin	3-12
Table 3-3 California and Federal Ambient Air Quality Standards	3-13
Table 3-4 Estimated Maximum Daily Construction Emissions.....	3-16
Table 3-5 Peak Daily Operational Emissions	3-18
Table 3-6 Localized Significance Threshold Construction Emissions.....	3-20
Table 3-7 Localized Significance Threshold Operational Emissions	3-21
Table 3-8 Energy Use During Construction	3-31
Table 3-9 Energy Use During Operations.....	3-31
Table 3-10 Estimated GreenHouse Gas Emissions from Construction.....	3-42
Table 3-11 Estimated Annual GreenHouse Gas Emissions from Project Operation.....	3-43
Table 3-12 Estimated Total Project Annual Greenhouse Gas Emissions	3-43
Table 3-13 Energy Action Plan Consistency.....	3-45
Table 3-14 Proposed Project General Plan Consistency Analysis.....	3-56
Table 3-18 Construction Equipment Reference Vibration Levels	3-68
Table 3-19 Estimated Project Construction Vibration Levels at Nearby Buildings	3-69

EXHIBITS

<u>Exhibit</u>	<u>Follows Page</u>
1-1 Regional Location and Local Vicinity	1-1
1-2 Aerial Photograph	1-1
2-1a Conceptual Elevations – East and West	2-1
2-1b Conceptual Elevations – North and South.....	2-1

APPENDICES

<u>Appendix</u>	
A	Air Quality and Greenhouse Gas Emissions Modeling Data
B	Energy Data
C	Noise Calculations

1.0 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

The purpose of this Initial Study is to (1) describe the proposed Rise Residence at 3550 E. Cameron Avenue (hereinafter referred to as the “Project”), which will be constructed in the City of West Covina and (2) provide an evaluation of potential environmental impacts associated with the Project’s construction and operation. This Initial Study has been prepared pursuant to the California Environmental Quality Act (CEQA), as amended (Section 21000 et. seq. of the *Public Resources Code*) and in accordance with the State CEQA Guidelines (Section 15000 et. seq. of the *California Code of Regulations*). Using Appendix G (Environmental Checklist Form) of the State CEQA Guidelines, the analysis covers all environmental topics. Upon completion of the analysis, if significant impacts are identified, the City may require preparation of an Initial Study/Mitigated Negative Declaration (IS/MND) for the Project.

The City of West Covina has the authority for Project approval and certification of the accompanying environmental documentation, as applicable.

1.2 PROJECT SUMMARY

1.2.1 LOCATION

The 1.06-acre Project site is in the City of West Covina, in Los Angeles County, California (APN 8277-030-027). The site is located at 3550 E. Cameron Avenue, west of S. Grand Avenue and over a mile south of Interstate (I) 10 Freeway. Local and regional access to the site is provided by S. Grand Avenue and I-10, respectively. The site is undeveloped and located within a large-lot residential area of the City.

Exhibit 1-1 depicts the Regional Location and Local Vicinity and Exhibit 1-2 shows the Aerial Photograph of the site and vicinity.

1.2.2 PROJECT PROPONENT

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1.2.3 EXISTING GENERAL PLAN AND ZONING

The Project site currently has a General Plan land use designation of Neighborhood Low. The land use designation in the general vicinity is the same, except for the Parks and Open Space land use designation to the west along E. Cameron Avenue.

In the City's Zoning Map, the site is zoned as R-1: Residential Single-Family and is within the Hillside Overlay Zone. Adjacent zoning designations are the same as the proposed Project site.

1.2.4 EXISTING SETTING

Project Site and Surrounding Land Uses

The Project site is currently undeveloped, located on a slope, and covered with vegetation. It is surrounded by single-family homes to the west and east and municipal water tanks to the south.

The Project site is off East Cameron Avenue and surrounded by large lot single-family detached residential units. To the west of the adjacent property along East Cameron Avenue, are the Heritage Park and Taylor House "Home of the Rose Float Foundation". South Hills High School and South Hills Country Club are located less than a mile to the west, at the intersection of Cameron Avenue and Barranca Street.

1.2.5 PROPOSED PROJECT

The Project involves development of a 2-story, 13,340-square-foot (sf) residence with a 938-sf basement and a 2,451-sf subterranean garage. A detached garage with a 1,195-sf second floor accessory dwelling unit (ADU) is also proposed. The Project will also include a swimming pool and spa plus other improvements including landscaping.

1.3 ORGANIZATION OF THE INITIAL STUDY

The Initial Study is organized into sections, as described below.

- **Section 1.0: Introduction.** This section provides an introduction, Project summary, and overview of the conclusions in the Initial Study.
- **Section 2.0: Project Location and Environmental Setting.** This section provides a brief description of the Project location and a description of the existing conditions of the Project site and vicinity.
- **Section 3.0: Project Description.** This section provides a description of the proposed Project and necessary discretionary approvals.
- **Section 4.0: Environmental Checklist.** The completed Environmental Checklist Form from the State CEQA Guidelines provides an overview of the potential impacts that may or may not result from Project implementation. The Environmental Checklist Form also includes "mandatory findings of significance", as required by CEQA.
- **Section 5.0: References.** This section identifies the references used to prepare the Initial Study.

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LAND USE

The proposed Project involves construction of a two-story residence with subterranean garage, a detached garage with a second-floor accessory dwelling unit, and an in-ground pool. Other activities associated with the Project would involve site grading, construction of retaining walls, construction and landscaping of three courtyards, and construction and paving of two driveways/motor courts. The residence will consist of a 13,340-sf main building area, a 1,936-sf detached building area, a 3,856-sf non-habitable garage, and a 1,936-sf ADU. The lot area is 42,840s sf and the Project components would cover approximately 8,174 sf or 21 percent, of the overall lot area. Exhibits 2-1a and 2-1b, Conceptual Elevations, depict the east, west, north, and south elevations of the proposed Project.

2.2 PROJECT ACCESS/PARKING

One primary ingress and egress point is proposed on the eastern boundary of the Project site, via a private gated entrance. Additionally, internal circulation consists of two driveway/motor courts. Project parking includes a subterranean parking garage, a detached garage, and surface parking opportunities throughout the Project site, including those within the driveways/motor circles. The subterranean garage would accommodate up to eight vehicles while the detached garage would park two vehicles.

2.3 CONSTRUCTION ACTIVITIES

Construction activities are anticipated to begin in January 2025 and continue in a single phase, through September 2026. Construction activity would occur for 8 hours per day, and 6 days per week, in accordance with the City's permitted hours of construction.

2.4 DISCRETIONARY APPROVALS

The following discretionary actions are required as part of the Project's approval and implementation:

- **Conditional Use Permit.** It is required to allow for a "large" house over 10,000 square feet.
- **Administrative Use Permit.** It is required to allow for a two-story single-family residence.
- **Subcommittee Design Review.** It is required for the architectural review of the proposed residence

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3.0 ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☐ Biological Resources | ☐ Cultural Resources | ☐ Energy |
| ☐ Geology and Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and Hazardous Materials |
| ☐ Hydrology and Water Quality | ☐ Land Use and Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population and Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☐ Tribal Cultural Resources |
| ☐ Utilities and Service Systems | ☐ Wildfire | ☐ Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency.)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to be the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Printed Name

For

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analysis,” as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact.

Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual resources that are seen from public viewing areas. The Our Natural Community Element of the City's General Plan identifies the San Jose Hills, located at the southeasterly boundary of the City, as a scenic vista (City of West Covina 2016a). The Project site is located within the northern slopes of the San Jose Hills. Views of the San Jose Hills may be experienced by motorists driving east along East Cameron Avenue. However, these views are limited due to intervening utility infrastructure, trees, and topography.

Additionally, location of the Project along East Cameron Avenue is such that would not block the potential views of the San Jose Hills to the motorists. Thus, the proposed Project during and post construction activities would not result in any adverse effect on a scenic vista by blocking views of the scenic vista from public vantage points.

Therefore, the Project would not have the potential to have a substantial adverse effect on a scenic vista due to its design and location, and a less than significant impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated scenic highways within West Covina (City of West Covina 2016a). The nearest Officially Designated State Scenic Highway is portions of the Angeles Crest Highway, located approximately 20 miles north of the Project

site (Caltrans 2024). Views of the Project site from this Officially Designated Highway are completely obstructed by distance, development, and intervening topography, and there is no direct line-of-sight to the Project area such that short-term construction activities and long-term operation would affect public views from the Angeles Crest Highway. State Route (SR) 57 between SR 91 and SR 60, located approximately 4.5-miles southeast of the Project site, is identified as Eligible for State Scenic Highway designation (Caltrans 2024). There are scenic resources, including trees and one historic building within the vicinity of the Project; however, views of the Project site from the portion of SR-57, which is an Eligible State Scenic Highway, are completely obstructed by intervening topography and development, and there is no direct line-of-sight to the Project area such that short-term construction activities and long-term operation would affect public views from SR 57. Therefore, implementation of the Project would not have the potential to damage scenic resources within a State scenic highway. Impacts would be less than significant.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The Project site is in an urbanized area as defined in Section 21071 of the Public Resources Code (PRC). As such, this analysis focuses on the Project's consistency with applicable zoning and other regulations governing scenic quality.

City of West Covina Municipal Code

Regulations relating to the aesthetic character of West Covina are contained in Chapter 7, Buildings and Building Regulations, Article X, Division 3, Development Standards, of the West Covina Municipal Code (WCMC), which regulates all building within the City. This section of code identifies development standards such as lighting, landscaping, and exterior design ensure that development within the City is visually similar and maintains a specific style. Additionally, Chapter 26 of the WCMC contains zoning and land use regulations, both of which affect the visual character and quality of the built environment and land use patterns within the community. These regulations are tools to implement the goals and policies of the General Plan and have played a large role in determining the current aesthetic character of the City. The Project would be required to comply with the said zoning and land use regulations contained within these chapters of the WCMC and would not deviate from the standards. As such, the Project would result in less than significant impacts.

City of West Covina General Plan

The Our Natural Community Element of the City of West Covina General Plan identifies two Policies governing scenic quality within the City, as discussed below:

P1.9 During the review of public and private development projects, analyze potential impacts to views of natural areas from public streets, parks, trails, and community facilities

- Threshold 4.1a, above, assessed the potential impacts to views of natural areas surrounding the Project site from public streets (East Cameron Avenue). The discussion did not identify any potential impacts. As such, the Project would be consistent with this policy.

P1.10 To preserve nighttime views within and immediately adjacent to single family residential zones, require property owners within and directly adjacent to these zones to utilize shielding and directional lighting methods to direct lighting away from adjoining properties.

- Threshold 4.1d, below, assesses the potential impacts related to nighttime views. As discussed, the Project would implement directional lighting methods and shielding to minimize lighting impacts to adjoining properties. As such, the Project would be consistent with this policy.

City of West Covina Zoning Code

The Project site is zoned R-1: Residential Single-Family and is within the Hillside Overlay Zone. As discussed, in Section 4.11, Land Use and Planning, the Project would be consistent with all regulations governing the R-1 and Hillside Overlay zoning regulations.

As such, impacts related to this threshold would be less than significant, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The Project site is in an area that is already subject to ambient lighting from the existing residential and recreational uses. The existing light sources include exterior and interior building lights.

Project construction activities would be limited to daytime hours, as permitted by the WCMC. Therefore, no lighting impacts would occur during construction.

Project buildout would introduce new light sources on the Project site; these would include both interior building lighting and exterior lighting along the upper and lower driveways, in the motor court, entry courtyard, center courtyard, and vista courtyard. Although new, this level of lighting would be consistent with the ambient and night-time lighting at the residential uses surrounding the site.

Moreover, to avoid potential impact and light trespass onto the surrounding uses, lighting associated with the new residence would be in compliance with WCMC which ensures that sensitive land uses are not affected by lighting associated with new developments. Section 26-519 of WCMC requires that “all lighting of the building, landscape, parking area, or similar facilities shall be hooded and directed to reflect away from adjoining properties” This is generally accomplished with shielding and directional lighting methods. Additionally, during nighttime, the proposed lighting would not be more intense than the surrounding uses, and no lighting that is considered of high intensity such as high wattage security lighting is

proposed that would cause substantial nighttime glare. Due to the developed nature of the Project area and existing ambient lighting, impacts associated with new lighting from the proposed Project would be less than significant.

Glare is a common daytime phenomenon and is due mainly to the occurrence of a high number of days per year with direct sunlight and the presence of large reflective surfaces. Excessive glare not only restricts visibility but also increases the ambient heat reflectivity in a given area. Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. Glare can create hazards to motorists and nuisances for pedestrians and other viewers. The proposed Project would be constructed with primarily non-reflective materials such as sandstone, cladding, and stucco on the exterior facades and concrete or clay tile roofing. The use of glass would be confined to windows and is not such that would generate substantial glare affecting surrounding uses. The Project would also comply with City regulations (RR AES-1). Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements

RR AES-1 Exterior lighting for the Project shall be designed and constructed in compliance with Section 26.519, Lighting, of the West Covina Municipal Code.

Mitigation Measures

Project implementation would not result in significant impacts related to Aesthetics; therefore, no mitigation measures are required.

3.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact Analysis

Would the Project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. Based on review of the California Department of Conservation Farmland Mapping and Monitoring Program's (FMMP) California Important Farmland Finder (CIFF) application, the Project site is designated as Urban and Built-Up Land (FMMP 2024a). As such, there are no designated farmlands in or near the Project site. Also, there are no existing or ongoing agricultural activities in or near the Project site. Therefore, the Project would not result in the conversion of these resources to non-agricultural use. Also, there are no agricultural activities on the Project site, and no farmland conversion or impacts to agricultural uses would occur because of the Project. No impacts on agricultural resources would occur, and no mitigation is required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project site is not zoned for agricultural use, nor is it under a Williamson Act contract (FMMP 2024b). Under the City of West Covina Zoning Code, the Project site is currently zoned R-1 (Residential Single Family) (City of West Covina 2024a). Thus, the

Project would not conflict with existing zoning for agricultural use. Therefore, the Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. No impacts would occur, and no mitigation is required.

b) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?

No Impact. The Project site is not zoned for forest land, timberland, or Timberland Production (FMMP 2024a). As discussed above, the Project site is zoned as Residential Single Family (R-1), and thus would not conflict with zoning for forest land and timberland and would not cause rezoning of such resources, as defined in Public Resources Code Sections 12220(g) and 4526 respectively. No impacts would occur, and no mitigation is required.

c) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As previously discussed, the Project site is located in an urbanized area and does not include any forest land or timberland. No loss of forest resources or conversion of forest land to non-forest use would occur with the Project. No impacts would occur, and no mitigation is required.

d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project site is in an urbanized area of the City of West Covina and does not include farmland or forest land. The Project site and surrounding area are not mapped as farmland, are not zoned for farmland or agricultural use, and do not contain such uses. As such, the Project would not result in the conversion of farmland to non-agricultural use, or the conversion of forest land to non-forest use. No impacts would occur, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Agriculture and Forest Resources; therefore, no mitigation measures are required.

3.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis

The South Coast Air Quality Management District (SCAQMD) has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants: ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, and particulate matter 10 and 2.5 microns. The characteristics and health effects of these criteria pollutants are described below:

- Ozone (O₃) is a nearly colorless gas that is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight). Ground-level O₃ exposure can cause a variety of health problems, including lung irritation, wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities; permanent lung damage; aggravated asthma; and increased susceptibility to respiratory illnesses.
- Carbon monoxide (CO) is a colorless and odorless toxic gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions.
- Nitrogen oxides (NO_x) are yellowish-brown gases, which at high levels can cause breathing difficulties. NO_x are formed when nitric oxide (a pollutant from internal combustion processes) combines with oxygen.
- Sulfur dioxide (SO₂) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- Particulate Matter 10 (PM₁₀) and Particulate Matter 2.5 (PM_{2.5}) refer to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since

fine particles can more easily cause irritation. Particulate matter includes both aerosols and solid particles. An example of particulate matter is fugitive dust. Short-term exposure to high PM_{2.5} levels is associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure to high PM_{2.5} levels is associated with premature mortality and development of chronic respiratory disease. Short-term exposure to high PM₁₀ levels is associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms, and possible premature mortality.

The SCAQMD develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary. It is directly responsible for reducing emissions from stationery (area and point), mobile, and indirect sources. To accomplish this goal, the SCAQMD prepares Air Quality Management Plans (AQMPs) in conjunction with the Southern California Association of Governments (SCAG), County transportation commissions, and local governments; develops rules and regulations; establishes permitting requirements for stationary sources; inspects emissions sources; and enforces such measures through educational programs or fines, when necessary, as indicated above. The SCAQMD has prepared an AQMP that establishes a program of rules and regulations directed at attaining the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

The current regional plan applicable to the Project is the SCAQMD's 2022 AQMP. The 2022 AQMP was adopted on December 2, 2022, by the SCAQMD Governing Board. The 2022 AQMP is a regional and multi-agency effort among the SCAQMD, CARB, SCAG, and USEPA. The 2022 AQMP includes an analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The purpose of the 2022 AQMP is to set forth a comprehensive program that would promote reductions in criteria pollutants, greenhouse gases, and toxic risk and efficiencies in energy use, transportation, and goods movement. The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2020-2045 RTP/SCS; updated emission inventory methods for various source categories; and SCAG's latest growth forecasts. The next iteration of the SCAQMD AQMP will incorporate the planning assumptions and growth forecasts contained in SCAG's latest 2024-2050 RTP/SCS adopted on April 4, 2024. The AQMP is based on projections of energy usage and vehicle trips from land uses within the SoCAB.

The 2022 AQMP evaluates integrated strategies and measures to meet the following NAAQS (SCAQMD 2022):

- 8-hour O₃ target of 80 parts per billion (ppb) by 2024, 75 ppb by 2032, 70 ppb by 2038;
- Annual PM_{2.5} (12 micrograms per cubic meter [µg/m³]) by 2025;
- 1-hour O₃ (120 ppb) by 2023; and
- 24-hour PM_{2.5} (35 µg/m³) by 2023.

The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. The two principal criteria for conformance to an AQMP are:

1. Whether a project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP.
2. Whether a project will exceed the assumptions in the AQMP based on the year of Project buildout.

To estimate if a project may adversely affect the air quality in the region, the SCAQMD has prepared the *Air Quality Analysis Guidance Handbook* (SCAQMD CEQA Handbook) to provide guidance to those who analyze the air quality impacts of projects (SCAQMD 1993). The SCAQMD CEQA Handbook provides significance thresholds for both construction and operation of projects within the SCAQMD's jurisdictional boundaries. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The SCAQMD CEQA Handbook states that any project in the SoCAB with daily emissions that exceed any of the identified significance thresholds may have an individually and cumulatively significant air quality impact. The City of West Covina uses the current SCAQMD thresholds to determine whether a project would have a significant impact (SCAQMD 2019). These SCAQMD thresholds are identified in Table 3-1, *South Coast Air Quality Management District Air Quality Significance Thresholds*.

**TABLE 3-1
SOUTH COAST AIR QUALITY MANAGEMENT
DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS**

Mass Daily Thresholds (lbs/day)		
Pollutant	Construction	Operation
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SOx: sulfur oxides. Source: SCAQMD 2019.		

Regulatory Background

The U.S. Environmental Protection Agency (USEPA) defines seven “criteria” air pollutants, as described above. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants (USEPA 2014). The California Air Resources Board (CARB) has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as “nonattainment” and the regional air quality agency must develop plans to attain the standards.

Based on monitored air pollutant concentrations, the USEPA and the CARB designate an area’s status in attaining the NAAQS and the CAAQS, respectively, for selected criteria pollutants. These attainment designations are shown in Table 3-2. As identified in Table 3-2, Los Angeles County is a nonattainment area for O₃, PM₁₀, and PM_{2.5} for the State standards and a nonattainment area for O₃, and PM_{2.5} for the State standards.

**TABLE 3-2
ATTAINMENT STATUS OF CRITERIA POLLUTANTS
IN THE SOUTH COAST AIR BASIN**

Pollutant	State	Federal
O ₃ (1 hour)	Nonattainment	No standards
O ₃ (8 hour)	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Attainment
Lead	Attainment	Attainment/Nonattainment*
All others	Attainment/Unclassified	No standards
O ₃ : ozone; PM _{2.5} : respirable particulate matter 10 microns or less in diameter; PM _{2.5} : fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO ₂ : nitrogen dioxide; SO ₂ : sulfur dioxide; SoCAB: South Coast Air Basin. * Los Angeles County is classified nonattainment for lead; the remainder of the SoCAB is in attainment of the State and federal standards. Source: CARB 2018		

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3-3), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue

lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Ozone (O₃) is a secondary pollutant and is created when nitrogen oxides (NO_x) and volatile organic compounds (VOCs) react in the presence of sunlight. The predominant source of air emissions generated by Project development would be from vehicle emissions. Motor vehicles primarily emit CO, NO_x, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead are shown in Table 3-3.

**TABLE 3-3
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary ^a	Secondary ^b
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM10	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM2.5	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
	1 Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	–
SO ₂	24 Hour	0.04 ppm (105 µg/m ³)	–	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)	0.075 ppm (196 µg/m ³)	–
Lead	30-day Avg.	1.5 µg/m ³	–	–
	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m ³	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

**TABLE 3-3
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS**

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary ^a	Secondary ^b
O ₃ : ozone; ppm: parts per million; µg/m ³ : micrograms per cubic meter; PM ₁₀ : respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; -: No Standard; PM _{2.5} : fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m ³ : milligrams per cubic meter; NO ₂ : nitrogen dioxide; SO ₂ : sulfur dioxide; km: kilometer.				
^a <i>National Primary Standards</i> : The levels of air quality necessary, within an adequate margin of safety, to protect the public health.				
^b <i>National Secondary Standards</i> : The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.				
Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).				
Source: SCAQMD 2016				

Would the Project:

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

Less Than Significant Impact. CEQA requires a discussion of any inconsistencies between a project and applicable General Plans (GPs) and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the Project includes the SCAQMD's AQMP, as discussed above.

The SCAQMD CEQA Handbook states that "New or amended GP Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP". Strict consistency with all aspects of the plan is usually not required. A project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency, as discussed above:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Both criteria are evaluated for the Project, as shown below.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed Project [thresholds 4.3(b) and 4.3(c), below], construction and operation of the Project would not exceed the SCAQMD's CEQA thresholds of significance and consequently would not result in an increase in the frequency or severity of existing air quality violations nor cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emissions reductions in the AQMP. Therefore, the Project is consistent with the first criterion.

With respect to the second criterion, the proposed Project was assessed as to whether it would exceed the assumptions in the AQMP. The SCAQMD's current air quality planning document is the 2022 Air Quality Management Plan (2022 AQMP). The 2022 AQMP was adopted on December 2, 2022, by the SCAQMD Governing Board. The 2022 AQMP is a regional and multi-agency effort among the SCAQMD, CARB, SCAG, and USEPA. The 2022 AQMP includes an analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. The purpose of the 2022 AQMP is to set forth a comprehensive program that would promote reductions in criteria pollutants, greenhouse gases, and toxic risk and efficiencies in energy use, transportation, and goods movement. The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's 2020-2045 RTP/SCS; updated emission inventory methods for various source categories; and SCAG's latest growth forecasts. The next iteration of the SCAQMD AQMP will incorporate the planning assumptions and growth forecasts contained in SCAG's latest 2024-2050 RTP/SCS adopted on April 4, 2024. The AQMP is based on projections of energy usage and vehicle trips from land uses within the SoCAB.

In addition, the Project would not significantly affect any regional population, housing, and employment projections prepared for the City of West Covina. Projects that are consistent with the projections of employment and population forecasts identified in the RTP/SCS prepared by SCAG are considered consistent with the SCAQMD's 2022 AQMP growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP.

City-specific growth forecasts are provided by SCAG as part of their 2020 initiative, Connect SoCal. According to the Growth Forecast Appendix prepared by SCAG for the 2020-2045 Connect SoCal plan, the City of West Covina is projected to add a total of 11,100 residents through the year 2045. The proposed Project's potential growth is anticipated to be seven persons, which is based on the ratio of 3.32 persons per household identified by the United States Census Bureau. The number of residents that would be added is well within SCAG's growth forecast of 11,100 residents for the City. In addition, the Project is in conformance with SCAG's regional sustainable development policies that promote infill development. Lastly, the Project would be consistent with the site's R-1: Residential Single Family zoning designation and Neighborhood - Low Density Residential (NL) General Plan land use designation. As a result, impacts related to implementation of the applicable air quality plan would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. Los Angeles County is a nonattainment area for O₃, PM₁₀, and PM_{2.5}, as shown in Table 3-2, Attainment Status of Criteria Pollutants in the South Coast Air Basin. The Project would generate PM₁₀, PM_{2.5}, NO₂, and O₃ precursors (NO_x and VOC) during short-term construction and long-term operations.

Construction Impacts

Construction-Related Regional Impacts

A project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation.

A project with daily emission rates below the SCAQMD's established air quality significance thresholds (shown in Table 3-1) would have a less than significant impact on regional air quality. Project emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.26 computer program (CAPCOA 2022). CalEEMod is designed to model construction and operational emissions for land development projects and allows for the input of project- and County-specific information. The CalEEMod input for construction emissions was based on the Project's construction assumptions provided by the Project applicant and default assumptions derived from CalEEMod.

Table 3-4, Estimated Maximum Daily Construction Emissions, presents the estimated maximum daily emissions during construction of the proposed Project and compares the estimated emissions with the SCAQMD's daily regional emission thresholds. As shown in Table 3-4, all criteria pollutants are below the SCAQMD's respective thresholds.

**TABLE 3-4
ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS**

Year	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2025	1	9	9	<1	<1	<1
2026	2	9	9	<1	<1	<1
Maximum Emissions	2	9	9	<1	<1	<1
SCAQMD Thresholds (Table 3-1)	75	100	550	150	150	55
Exceeds SCAQMD Thresholds?	No	No	No	No	No	No
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.						
Source: SCAQMD 2019 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod model outputs.						

Cumulative Construction Impacts

Construction activities associated with the proposed Project would result in less than significant construction-related regional and localized air quality impacts, as quantified above in Table 3-4, Estimated Maximum Daily Construction Emissions, and Table 3-6, Localized Significance Threshold Construction Emissions (discussed under Threshold 4.3c), respectively. Short-term cumulative impacts related to air quality could occur if construction of the Project and other projects in the surrounding area were to occur simultaneously. In particular, with respect to local impacts, the consideration of cumulative construction particulate (PM10 and PM2.5) impacts is limited to cases when projects constructed

simultaneously are within a few hundred yards of each other because of: (1) the combination of the short range (distance) of particulate dispersion (especially when compared to gaseous pollutants), and (2) the SCAQMD's required dust-control measures, which further limit particulate dispersion from the Project site (RR AQ-1).

SCAQMD's policy with respect to cumulative impacts associated with the above-referenced pollutants and their precursors is that impacts that would be directly less than significant on a project level would also be cumulatively less than significant (SCAQMD 2003a). Because the Project's construction emissions are below the SCAQMD's regional and local significance thresholds, local construction emissions would not be cumulatively considerable, and the impact would be less than significant. No mitigation is required.

Operational Impacts

The following section provides an analysis of potential long-term air quality impacts to regional air quality with the long-term operation of the proposed Project. The potential operations-related air emissions have been analyzed below for the regional and local criteria pollutant emissions and cumulative impacts.

Operations-Related Regional Impacts

Operational emissions associated with the Project are comprised of area, energy, and mobile source emissions. The principal source of VOC emissions associated with the Project would result from vehicle trips. Area and energy source emissions are based on CalEEMod assumptions for specific land uses and size. Mobile source emissions are based on estimated Project-related trip generation forecasts derived from the Institute of Transportation Engineers (ITE). The Project would generate an average of 19 trips per day based on the ITE rate of 9.44 trips per dwelling unit for detached single-family residential. The peak day operational emissions for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} daily emissions that would be created from the Project's long-term operation have been calculated and are summarized below in Table 3-5, Peak Daily Operational Emissions.

**TABLE 3-5
PEAK DAILY OPERATIONAL EMISSIONS**

Source	Emissions (lbs/day)*					
	VOC	NOx	CO	SOx	PM10	PM2.5
Mobile	<1	<1	1	<1	<1	<1
Area	<1	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Water	<1	<1	<1	<1	<1	<1
Waste	<1	<1	<1	<1	<1	<1
Refrig.	<1	<1	<1	<1	<1	<1
Stationary sources	1	<1	2	<1	<1	<1
Total Operational Emissions*	1	<1	2	<1	<1	<1
<i>SCAQMD Significance Thresholds (Table 3-1)</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Significant Impact?	No	No	No	No	No	No
lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District. * Some totals do not add due to rounding. Source: SCAQMD 2019 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod model outputs.						

The data provided in Table 3-5 shows that none of the criteria pollutants analyzed would exceed the SCAQMD's regional emissions operational thresholds. Therefore, operational impacts related to regional air quality would be less than significant, and no mitigation is required.

Cumulative Operational Impacts

As shown in Table 3-5, Peak Daily Operational Emissions, and Table 3-6, Localized Significance Thresholds Operational Emissions (under Threshold 4.3c, below) operational emissions of VOC, NOx, CO, SOx, PM10, and PM2.5 would be below the SCAQMD CEQA significance thresholds. Consistent with the approach described above (under Cumulative Construction Impacts), SCAQMD's policy with respect to cumulative impacts associated with the above-referenced pollutants and their precursors is that impacts that would be directly less than significant on a project level would also be cumulatively less than significant. Therefore, because the Project's operational emissions are less than the respective SCAQMD daily operational thresholds, the Project's operations phase activities would not contribute to a cumulatively considerable net increase of a pollutant for which the SoCAB is in nonattainment. Emissions of nonattainment pollutants or their precursors would not be cumulatively considerable and would be less than significant, and no mitigation is required.

Cumulative Health Impacts

The SoCAB is designated as nonattainment for O3, PM10, and PM2.5, which means that the background levels of those pollutants are, at times, higher than the ambient air quality

standards. The air quality standards were set to protect public health, including the health of sensitive individuals (the elderly, children, and the sick). Therefore, when the concentrations of those pollutants exceed the standard, it is likely that some sensitive individuals in the population would experience health effects. These health effects are not identified for specific individual receptors nor does the analysis identify the magnitude of health effects. The regional analysis detailed above found that the Project would not exceed the SCAQMD regional significance thresholds for VOC and NO_x (ozone precursors), PM₁₀, and PM_{2.5}. As such, the Project would result in a less than significant cumulative health impact, and no mitigation is required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. A significant impact may occur when a project generates pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large. Exposure of sensitive receptors is addressed for emissions from construction and operation of the proposed Project. To address construction activities, the analysis below includes the following analyses: localized air quality impacts from construction and toxic air contaminants (TACs), specifically diesel particulate matter (DPM) from on-site construction, and asbestos and exposure to lead-based paint during demolition activities. To address operational emissions exposure to sensitive receptors, the analysis below discusses local air quality impacts from on-site operations and CO hotspots. Operational, long-term TACs may be generated by some industrial land uses; commercial land uses (e.g., gas stations and dry cleaners); and diesel trucks on freeways. Residential uses do not generate substantial quantities of TACs; therefore, the Project would result in less than significant impacts related to operational TACs, and no mitigation is required.

Construction

Localized Criteria Pollutants from On-Site Construction

In addition to the mass daily emissions thresholds established by the SCAQMD, short-term local impacts to nearby sensitive receptors from on-site emissions of NO_x, CO, PM₁₀, and PM_{2.5} are examined based on SCAQMD localized significance threshold (LST) methodology. To assess local air quality impacts for development projects without complex dispersion modeling, the SCAQMD developed screening (lookup) tables to assist lead agencies in evaluating impacts.

The LST method is recommended to be limited to projects that are five acres or less. For the purposes of an LST analysis, SCAQMD considers receptors where it is possible that an individual could remain for 1 hour for NO₂ and CO exposure and 24 hours for PM₁₀ and PM_{2.5} exposure. The emissions limits in the lookup tables are based on the SCAQMD's Ambient Air Quality Standards (SCAQMD 2016). The closest receptors to the Project site are single family uses located north, east, and west of the Project site. Individuals at these residences were evaluated for exposure for 1 hour and 24 hours. The emissions thresholds are for receptors within 25 meters (82 feet) of the Project site; the thresholds for receptors farther away would be higher, and the Project emissions would be a smaller fraction of the thresholds.

Table 3-6, Localized Significance Threshold Construction Emissions, shows the maximum daily on-site emissions for construction activities compared with the SCAQMD LSTs with receptors within 25 meters for a Project site area of 1 acre. The Project's maximum daily on-site emissions would occur during the grading phase. As shown in Table 3-6, the localized emissions from the Project would be below the respective SCAQMD thresholds, and impacts to sensitive receptors would be less than significant, and no mitigation is required.

**TABLE 3-6
LOCALIZED SIGNIFICANCE THRESHOLD CONSTRUCTION EMISSIONS**

Emissions and Thresholds	Emissions (lbs/day) ^a			
	NO _x	CO	PM ₁₀	PM _{2.5}
Project maximum daily on-site emissions	8	7	<1	<1
SCAQMD Localized Significance Threshold^a	83	673	5	4
Exceed threshold?	No	No	No	No
lbs/day: pounds per day; NO _x : nitrogen oxides; CO: carbon monoxide; PM ₁₀ : respirable particulate matter 10 microns or less in diameter; PM _{2.5} : fine particulate matter 2.5 microns or less in diameter. ^a Data is for SCAQMD Source Receptor Area 11, South San Gabriel Valley, 25-meter distance, 1 acre. Source: SCAQMD 2009 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod outputs.				

Toxic Air Contaminant Emissions from On-Site Construction

Construction activities would result in short-term, project-generated emissions of DPM from the exhaust off-road, heavy-duty diesel equipment used for site preparation (e.g., demolition, excavation, and grading); paving; building construction; and other miscellaneous activities. CARB identified DPM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments—which determine the exposure of sensitive receptors to TAC emissions—should be based on a 40-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment in operation, and the total construction period would be relatively short when compared to a 40-year exposure period. Combined with the highly dispersive properties of DPM and additional reductions in particulate emissions from newer construction equipment, as required by USEPA and CARB regulations, construction emissions of TACs would not expose sensitive receptors to substantial emissions of TACs. The impact would be less than significant, and no mitigation is required.

Operational

Localized Criteria Pollutants from On-site Operations

Project-related air emissions may have the potential to exceed the State and federal air quality standards in the vicinity of the Project even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. Project-related air emissions from on-site sources such as architectural coatings, landscaping equipment, and on-site usage of natural gas appliances may have the potential to generate emissions that exceed the State and federal air quality standards in the vicinity of the Project even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB.

The local air quality emissions from on-site operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the LST Methodology. Table 3-7, Localized Significance Threshold Operational Emissions, shows the on-site operational emissions from area sources, energy usage, vehicles operating on-site, and the calculated emissions thresholds.

**TABLE 3-7
LOCALIZED SIGNIFICANCE THRESHOLD
OPERATIONAL EMISSIONS**

On-Site Emission Source	Pollutant Emissions (pounds/day) ^b			
	NOx	CO	PM10	PM2.5
Mobile ^a	<1	<1	<1	<1
Area	<1	<1	<1	<1
Energy	<1	<1	<1	<1
Water	<1	<1	<1	<1
Waste	<1	<1	<1	<1
Refrig.	<1	<1	<1	<1
Stationary	<1	2	<1	<1
Project's total maximum daily on-site emissions	<1	2	<1	<1
SCAQMD Localized Significance Threshold^b	83	673	1	1
Exceeds Threshold?	No	No	No	No
lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter.				
^a Onsite vehicle emissions based on 5% of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the Project site.				
^b Data is for SCAQMD Source Receptor Area 11, San Gabriel Valley, with a source receptor distance of 25-meters, 1 acre.				
Source: SCAQMD 2009 (thresholds); see Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data, for CalEEMod outputs.				

The data provided in Table 3-7 shows that the ongoing operations of the Project would not exceed the local NO_x, CO, PM₁₀, and PM_{2.5} thresholds of significance. Therefore, operation of the Project would create a less than significant impact to sensitive receptors, and no mitigation is required.

Carbon Monoxide Hotspot

In an urban setting, vehicle exhaust is the primary source of CO. Consequently, the highest CO concentrations generally are found close to congested intersections. Under typical meteorological conditions, CO concentrations tend to decrease as the distance from the emissions source (e.g., congested intersection) increases. Therefore, for purposes of providing a conservative worst-case impact analysis, CO concentrations typically are analyzed at congested intersection locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. If impacts are less than significant close to congested intersections, impacts also would be less than significant at more distant sensitive-receptor and other locations. An initial screening procedure is provided in the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol) to determine whether a project poses the potential to generate a CO hotspot (UCD ITS 1997). The key criterion is whether the Project would worsen traffic congestion at signalized intersections operating at level of service (LOS) E or F. If a project poses potential for a CO hotspot, quantitative screening is required.

The Project's daily trips, as well as AM and PM peak hour trips, were quantified using the ITE's 11th Edition Trip Generation Manual. The Project is anticipated to generate approximately 19 trips per day, with one trip occurring during the AM peak hour and two trips during the PM peak hour (ITE 2021). The number of trips the Project would generate is considered to be negligible and would not be enough to significantly degrade any intersection's LOS. In addition, the 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (SCAQMD 2003b) evaluated numerous intersections for the potential to result in CO hotspots and found that the 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day. Because the roadways proximate to the Project site have substantially less traffic than 400,000 trips per day, CO concentrations at nearby roadway intersections are anticipated to be substantially less than the CO ambient air quality standards. Moreover, vehicle standards have become increasingly more stringent since 1992, and background CO concentrations are less than in 1992. As such, existing CO concentrations would be less than the ambient air quality concentration standards and the small contribution of Project-related traffic would likewise not result in CO concentrations that would exceed either the State or federal ambient air quality standards. The Project would result in less than significant impacts related to CO hotspots, and no mitigation is required.

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

Less Than Significant Impact. Project construction would use equipment and activities that could result in other emissions (such as those leading to odors). However, these odors would be typical during construction and not extraordinarily objectionable. Potential construction

odors include on-site construction equipment's diesel exhaust emissions as well as roofing, painting, and paving operations. There may be situations where construction activity odors could be noticed. However, these odors would be temporary and would dissipate rapidly from the source with an increase in distance. These odors would not be of such magnitude to cause a public nuisance. Therefore, the impacts would be short-term; would not affect a substantial number of people; and would be less than significant.

According to the SCAQMD CEQA Handbook, land uses associated with odor complaints typically include agricultural uses, sewer treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). The Project does not include any uses identified by the SCAQMD as being associated with odors, and therefore, would not likely produce objectionable odors. In addition, the Project uses are regulated from nuisance odors or other objectionable emissions by SCAQMD Rule 402, Nuisance (RR AQ-2). Rule 402 prohibits discharge from any source of air contaminants or other material which would cause injury, detriment, nuisance, or annoyance to people or the public. Overall, there would be a less than significant impact, and no mitigation is required.

Regulatory Requirements

- RR AQ-1** All construction activities shall be conducted in compliance with South Coast Air Quality Management District's Rule 403, Fugitive Dust, for controlling fugitive dust and avoiding nuisance. Contractor compliance with Rule 403 requirements shall be mandated in the contractor's specifications.
- RR AQ-2** All construction activities shall be conducted in compliance with South Coast Air Quality Management District Rule 402, Nuisance, which states that a project shall not "discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property".

Mitigation Measures

Project implementation would not result in significant impacts related to Air Quality; therefore, no mitigation measures are required.

3.4 **BIOLOGICAL RESOURCES**

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

Would the Project:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

Less Than Significant Impact. The Project site is located within an urbanized portion of the City and lacks potentially suitable habitat to support listed sensitive or special status plant or wildlife species for the area. Typically, significant wildlife habitats do not occur within the urbanized portions of a City. Vegetation on-site is non-native and disturbed, and the Project site and surrounding area is anticipated to be utilized primarily by wildlife species common to urban areas. The Crotch's bumblebee, a candidate for listing under the California Endangered Species Act, lives in grasslands, shrublands, chaparral, desert margins, and semi-urban areas. Although no native vegetation types are present on the Project site, the Crotch's bumblebee may potentially occur onsite, similar to any other site in Southern

California. Therefore, as part of the Project, a biologist will be retained to survey for any Crotch's bumblebee and nesting prior to the start of construction (within three days). If any active nests are identified, construction activity will stay outside of a no-disturbance buffer, as recommended by the biologist. In light of this Project feature, potential impacts would be less than significant, and no mitigation is required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

No Impact. The Project site does not contain any riparian habitat or other sensitive natural vegetation communities identified in the local or regional plans or by the California Department of Fish and Wildlife (CDFW) and US Fish and Wildlife Service (USFWS). There would be no impact to riparian habitats or sensitive natural vegetation communities, and no mitigation is required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The Project site does not support State or federally protected wetlands, or other areas under the jurisdiction of the CDFW, the Regional Water Quality Control Board (RWQCB), or the U.S. Army Corps of Engineers (USACE). There are no jurisdictional drainage, wetland, or riparian habitats on the Project site. Therefore, regulatory approvals from the CDFW, RWQCB, or USACE would not be required for implementation of the Project. There would be no impact, and no mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The undeveloped Project site is within a developed area of the City. The site is isolated from regional wildlife corridors and linkages, and there are no riparian corridors, creeks, or useful patches of steppingstone habitat (natural areas) within or connecting the Project site to any identified wildlife corridors or linkages. As a result, implementation of the proposed Project would not disrupt or have any adverse effects on any migratory corridors or linkages in the surrounding area. The Project would not affect the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, as the Project is part of none. Also, there are no native wildlife nursery sites on or near the site.

Currently there are no trees but only vegetation on the Project site. Although unlikely as there are no trees, there may be nesting potential on the site for birds protected by the Federal Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. The MBTA protects common and special status migratory birds and their nests and eggs. If site ground disturbance or vegetation removal activities occur during the nesting season (January 15th and September 15th), active bird nests, if

present, on the site may be disturbed by the proposed Project, resulting in a significant impact. As a project design feature (PDF), a pre-construction survey for nesting birds will be conducted within three days of the start of any vegetation removal or ground disturbing activities. If an active nest is identified during the pre-construction survey, construction activities will stay outside of a no-disturbance buffer, as determined by a wildlife biologist, until the young have left the nest or the nest otherwise becomes inactive under natural conditions. The potential impacts would be less than significant with the PDF, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Currently there are no trees but only vegetation on the site. The proposed landscape plan would comply with Chapter 26, Article XIV, Division 1, Water Efficient Landscaping, of the West Covina Municipal Code, as reviewed and approved by the City of West Covina (RR BIO-1). The Project would not conflict with any local policies or ordinances, no impacts would occur, and no mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed Project site is in an urbanized region and not within any established Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved type of habitat conservation plan. In addition, there are no HCP or NCCP areas within two miles of the Project site. Therefore, the proposed Project would not have any significant impacts in this regard, and no mitigation is required.

Regulatory Requirements

RR BIO-1 The proposed on-site and off-site trees shall be planted, preserved, removed, replaced and/or maintained in accordance with Chapter 26, Article XIV, Division 1, Water Efficient Landscaping, and Chapter 26, Article VI, Division 9, Preservation, Protection and Removal of Trees, of the West Covina Municipal Code.

Mitigation Measures

Project implementation would not result in significant impacts related to Biological Resources; therefore, no mitigation measures are required.

3.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

This analysis used the results of the City of West Covina 2016 General Plan Update (Plan WC) and Downtown Plan and Code EIR (Rincon 2016).

Impact Analysis

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact. The National Register of Historic Places (NRHP) Database does not identify historic resources in the City. While there are no properties within ½-mile of the Project site that the City has previously recommended nomination to the California Register of Historical Places, the Taylor House, located at 3510 Cameron Avenue, is listed on the City of West Covina's website as a restored resource (West Covina 2016a). While historically significant, the Taylor House has not been officially designated as a historic landmark. The Taylor House is located approximately 0.07 mile west of the Project site but is not adjacent to the site. Given the distance with an existing large lot residence located between the proposed Project and the Taylor House and that all construction related activities would occur within the site, impacts to historical resources pursuant to Section 15064.5 would be less than significant, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact. The NRHP Database found no archaeological resources in the City. However, buried historical and/or archaeological materials have the potential to be uncovered during ground-disturbing activities, similar to any other site. If Project grading and excavation occurs within native sediment, the Project Applicant (as a PDF) may retain a qualified Archaeologist to monitor during large areas of earth-moving activities, as needed. The potential impacts would be less than significant with the proposed PDF, and no mitigation is required.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact. There is no indication that human remains are present within the Project site. However, construction activities may unearth previously undiscovered human remains. In compliance with State and federal regulations, if human remains are encountered during excavation activities, all work shall halt at the site and or any nearby areas reasonably suspected to overlie adjacent remains, and the County Coroner shall be notified (RR CUL-1). The Coroner shall determine whether the remains are of forensic interest within two working days of receiving notification. If the Coroner, with the aid of the qualified archaeologist, determines that the remains are prehistoric, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours of the determination. The NAHC shall be responsible for designating the most likely descendant (MLD), who will be responsible for the ultimate disposition of the remains, as required by Section 5097.98 of the California Public Resources Code. Compliance with RR CUL-1 would ensure that impacts on human remains would be less than significant. No mitigation is required.

Regulatory Requirements

RR CUL-1 If human remains are encountered during any Project-related ground-disturbing activities, Section 7050.5 of the *California Health and Safety Code* states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Section 5097.98 of the *California Public Resources Code*. The provisions of Section 15064.5 of the California Environmental Quality Act Guidelines shall also be followed. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. These requirements shall be included as notes on the contractor specification and verified by the Community Development Department, prior to issuance of grading permits. This measure shall be implemented to the satisfaction of the City in consultation with the County Coroner.

Mitigation Measures

Project implementation would not result in significant impacts related to Cultural Resources; therefore, no mitigation measures are required.

3.6 ENERGY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Impact Analysis

Would the Project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Less Than Significant Impact. Section 21100(b)(3) of the *California Public Resources Code* and Appendix F to the State CEQA Guidelines require a discussion of potential energy impacts of proposed projects. Appendix F states:

The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

- (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 sources.

Southern California Edison (SCE) and the Southern California Gas Company (SCGC) are utility companies that currently provide and would continue to provide electrical and natural gas services to the Project site. Compliance with energy efficiency and conservation policies and regulations is discussed in this section.

The City of West Covina has adopted an Energy Action Plan (EAP) to address environmental and fiscal impacts associated with energy consumption. The EAP was developed to guide the City toward attainable conservation goals that would reduce the impact of GHG emissions within the community. These conservation goals include:

- Educating the public about energy saving techniques and programs.
- Promoting and creating energy conservation opportunities and programs.
- Installing environmentally benign, renewable and reliable energy facilities.
- Participating in alliances with local businesses and with other agencies.

- Pursuing and performing local and higher funding opportunities.
- Coordinating other City policies, programs and ordinances to become compatible with Sustainable Community goals.

The State of California has also adopted efficiency design standards within the Title 24 Building Standards and CALGreen requirements (RR ENE-1). Title 24 of the California Code of Regulations (CCR, specifically, Part 6) is California's Energy Efficiency Standards for Residential and Non-residential Buildings. Title 24 was established by the California Energy Commission (CEC) in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and to provide energy efficiency standards for residential and non-residential buildings. The 2022 California Green Building Standards Code (24 CCR, Part 11), also known as the CALGreen Code, contains mandatory requirements for new residential and nonresidential buildings throughout California. The development of the CALGreen Code is intended to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the following construction practices: (1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental quality (CBSC 2022). The CALGreen Code was adopted to reduce construction waste, make buildings more efficient in the use of materials and energy, and reduce environmental impact during and after construction. Starting on January 1, 2020, all new single-family residential uses are required to offset their annual electrical demand through the use of energy efficiency and solar photovoltaic panels. These new homes are expected to reduce energy use by more than 50 percent. The proposed Project would be consistent with RR ENE-1.

Construction

Project construction would require the use of construction equipment for grading and building activities. All off-road construction equipment is assumed to use diesel fuel. Construction also includes the vehicles of construction workers and vendors traveling to and from the Project site.

Fuel consumption was estimated based on anticipated construction durations, as well as equipment quantities and types. Construction energy consumption was estimated using a proprietary energy consumption model utilizing a combination of the California Emissions Estimator Model (CalEEMod), the Off-Road Diesel Analysis (OffRoad) inventory tool, and CARB's Emission Factors (EMFAC) database. As shown in Table 3-8, a total of 1,124 gallons of gasoline, 4,090 gallons of diesel fuel, and 693 kilowatt hours of electricity is estimated to be consumed during Project construction.

**TABLE 3-8
ENERGY USE DURING CONSTRUCTION**

Source	Gasoline - gallons	Diesel Fuel - gallons	Electricity (kWh/yr)
Off-road Construction Equipment	0	4,087	693
Worker commute	1,124	3	0
Vendors	0	0	0
On-road haul	0	0	0
Totals	1,124	4,090	693
Sources: Psomas 2020 based on data from CalEEMod, OffRoad and EMFAC2017. Energy data can be found in Appendix C of this Initial Study.			

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. Energy used in the construction of the Project would enable the development of buildings that meet the latest energy efficiency standards as detailed in California's Title 24 building standards. Therefore, the proposed construction activities would not result in inefficient, wasteful, or unnecessary energy consumption.

Operations

The proposed Project would promote building energy efficiency through compliance with energy efficiency and green building standards (Title 24 and CALGreen). The Project site is currently undeveloped. The development of the Project would be required to comply with the latest (2022) building energy efficiency standards adopted by the State of California. The estimated energy consumption attributable to the Project is shown in Table 3-9 below.

**TABLE 3-9
ENERGY USE DURING OPERATIONS**

Land Use	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Project Land Uses	1,627	625	76,671	13,790
Title 24 Energy Consumption	-	-	-	13,790
Total	1,627	625	76,671	0
Sources: Psomas 2024. Energy data can be found in Appendix C of this Initial Study.				

As shown in the above table, the Project's operation would result in the consumption of approximately 1,627 gallons of gasoline, 625 gallons of diesel, and 76,671 kilo-British thermal units of natural gas. The Project would include solar panels in accordance with Title 24. These solar panels are estimated to supply 100 percent of the electricity consumed by the Project. Since the Project would incorporate energy efficient appliances, fixtures, and

solar panels into the Project design, the Project's operation would not result in inefficient, wasteful, or unnecessary energy consumption. Therefore, the proposed Project would not result in an inefficient, wasteful, or unnecessary consumption of energy. There would be a less than significant impact, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The Project would be required to comply with the State of California's Title 24 Building Standards and Title 24 Energy Efficiency Standards (RR ENE-1). The 2022 Building Energy Efficiency Standards contains mandatory requirements for appliances; lighting controls; insulation; solar readiness; space-conditioning equipment (heating and cooling); water heating; windows and doors; electrical power distribution systems; and the prohibition of pilot lights, among others. The requirements of the energy efficiency standards will result in the reduction of natural gas and electricity consumption (CBSC 2022a).

In addition, the CALGreen Code provides standards for energy efficiency (energy-efficient appliances); electric vehicle charging; renewable energy; lighting; insulation; and the planting of trees for shade. Inclusion of CALGreen Code measures reduces energy consumption through the use of energy efficient appliances, lighting, and building design features (insulation). In addition, the planting of trees for shade would reduce energy consumption related to air conditioning, while the inclusion of insulation would reduce energy consumption related to heating (CBSC 2022b).

The Project would be constructed in compliance with the latest energy efficiency and green building standards, which would be verified prior to the issuance of a certificate of occupancy. As a result, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and no impacts are anticipated.

Regulatory Requirements

RR ENE-1 The Project must be designed in accordance with the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) and the Title 24 Green Building Standards Code (CALGreen), (CCR, Title 24, Part 11). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

Mitigation Measures

Project implementation would not result in significant impacts related to Energy; therefore, no mitigation measures are required.

3.7 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☒	☐
ii) Strong seismic groundshaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Impact Analysis

A Geotechnical Engineering and Geological Report (Geotechnical Report) has been prepared by Environmental Geotechnology Laboratory, Inc. (EGL) (April 2024) for the proposed Project to assess the geotechnical conditions on the site and provide structural design recommendations for the construction of the Project. The findings of the Geotechnical Report are summarized below, and the report is included as Appendix D to this Initial Study.

Would the Project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Less Than Significant Impact. Ground rupture occurs when movement on a fault breaks through the surface. The State of California has established Earthquake Fault Zones for the purpose of mitigating the hazard of fault rupture by prohibiting the location of most human occupancy structures across the traces of active faults. The Project site is outside of an Earthquake Fault Zone and Alquist-Priolo Earthquake Fault Zoning Map. Therefore, per the Geotechnical Report, the potential for surface rupture onsite is low. Therefore, the Project has a less than significant potential to cause adverse effects related to surface rupture from an Alquist-Priolo Fault Zone, and no mitigation is required.

ii) Strong seismic groundshaking?

Less Than Significant Impact. The subject property is located in the northern slopes of San Jose Hills and consisted of east west trending ridge with low to moderately steep hills. Subject property is located northwest and southeast of the San Jose Hills fault and Walnut Creek structural areas approximately 4,940 to 5,550 feet southeast and 5,590 to 6,000 feet northwest of the subject property, respectively. Both faults (as part of the Puente Hill fault system) are classified as active fault systems that have past seismic events that occurred within the last 11,000 years based on the definition of California Geological Survey. It is anticipated that because the Project site is located within a seismically active region, the Project site would experience ground shaking during the life of the Project.

In order to reduce the effects of ground shaking, the Project should be designed in accordance with all applicable current codes and standards utilizing the appropriate seismic design parameters to reduce seismic risk as defined by California Geological Survey (CGS) Chapter 2 of Special Publication 117a and the 2022 California Building Code (RR GEO-1). All buildings and other structures constructed as part of the proposed Project would be designed in accordance with applicable requirements of the CBC in effect at the time of grading plan submittal, and any applicable building and seismic codes in effect at the time the grading plans are submitted. Based on the subsurface conditions exposed during field investigation and laboratory testing program, the Geotechnical Report includes recommendations to be incorporated in the design and construction phases of the Project and concludes that the proposed Project is feasible from a geotechnical standpoint, with incorporation of the Geotechnical Report recommendations into the design and construction of the Project and compliance with applicable building and seismic codes. Therefore, there would be a less than significant impact from strong seismic groundshaking, and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

No Impact. Liquefaction of soils may be caused by cyclic loading such as that imposed by ground shaking during earthquakes. The increase in pore pressure results in a loss of strength, and the soil then can undergo both horizontal and vertical movements, depending on the site conditions. Liquefaction is generally known to occur in loose (low-density), saturated, relatively clean, fine-to medium-grained cohesionless soils. Effects of liquefaction can include sand boils, settlement, and bearing capacity failures below structural foundations.

As indicated in the Geotechnical Report (Appendix D), based on a review of the State of California Official Map of Earthquake Zones of Required Investigation for the San Dimas Quadrangle, the site is not located within a Zone of Required Investigation for Liquefaction. Additionally, with the absence of shallow groundwater, the potential for liquefaction to occur onsite is low. Therefore, the Project would not have the potential to cause substantial adverse effects, including the risk of loss, injury, or death, due to seismic-related ground failure, including liquefaction. No impact would occur, and no mitigation is required.

iv) Landslides?

No Impact. The Project site and surrounding area are located within the northern slopes of the San Jose Hills on a vacant hillside site bordered easternly and north by low to moderately steep slopes, with ground elevations on the Project site at approximately 480 feet above mean sea level (msl). The California Department of Conservation (DOC) does not designate the site and the surrounding area as an Earthquake-Induced Landslide Zone, which include areas where historical occurrence of landslide movement has occurred or where local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacement (DOC 2024). Therefore, the Project would not have a significant potential to result in a substantial adverse effect, including the risk of loss, injury, or death, due to landslides. No impact would occur, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. According to the Geotechnical Report, it is EGL's opinion that the surficial soils at the existing Project site, specifically the northerly descending slopes, will not significantly impact the subject property or neighbor's property due to fully established vegetation growth with future retaining walls retaining the upslope area. However, all slopes will be subject to surficial erosion. Therefore, as discussed in the Geotechnical Report, slopes should be protected from surface runoff by means of top-of-slope compacted earth berms or concrete interceptor drains, all slopes should be landscaped with suitable plants requiring minimal cultivation and irrigation water in order to thrive, irrigation system should be installed and properly maintained, and over-watering and subsequent saturation of slope surface should be avoided.

Additionally, as the Project site has over one acre of land area, it would be required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities or coverage under the NPDES Construction General Permit. The Construction

General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance best management practices (BMPs) to reduce the potential for soil and wind erosion during construction activities (RR HYD-1, in Section 4.10). Further, the proposed Project must comply with the City's grading ordinance, which requires preparation of an erosion control plan for City approval prior to issuance of a grading permit (RR GEO-2). With compliance with these regulations, construction-related soil erosion would be less than significant, and no mitigation is required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. As discussed in the Geotechnical Report, based on EGL's review of the "Seismic Hazard Zones Map of San Dimas Quadrangle" (CDMG,1999), the site is not located in a mapped earthquake-induced liquefaction or landslide potential areas. Additionally, based on the Geotechnical Report, groundwater, seeps, seepage or springs and/or static surface streams were not observed in the any of the exploration or surficially during subsurface investigation to the maximum explored depth of 16 feet below the existing ground surface. As such, the current local groundwater is deeper than the maximum explored depths. Therefore, groundwater is not expected to be a significant constraint during Project construction. It is noted that groundwater may be a constraint if grading is completed during the rainy season when perched water is more likely to occur. However, Project grading is not anticipated to occur during rainy season. Impacts would be less than significant, and no mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. As indicated in the Geotechnical Report, it is anticipated that the proposed structures will be underlain by bedrock and/or new certified compacted fill of low expansion potential. However, as indicated in the geotechnical report, it is recommended that the construction areas be cut to grade then observed by a representative of EGL to verify the sub-grade soil conditions for any potential needs of removal of loose soils and replacement with compacted fill. The report states that this may also be necessary due to difference in expansion characteristics of foundation materials beneath a structure. Locally deeper removals may be necessary to expose competent natural ground. Additionally, cut and fill transition during the grading process is anticipated, and it is recommended to remove all loose surficial soil to expose competent bedrock within the proposed fill area prior to adding any fill material. The actual removal depths should be determined in the field as conditions are exposed. Visual inspection and/or testing may be used to define removal requirements. In compliance with the recommendation in the report, the impacts would be less than significant, and no mitigation is required.

Additionally, Project construction would be required to comply with 2022 California Building Code (RR GEO-1). The Geotechnical Report concludes that the proposed Project is feasible from a geotechnical standpoint, provided the recommendations in the Geotechnical

Report are incorporated into the design and construction of the proposed Project. The Applicant/Project contractor will ensure implementation and enforcement of all recommendations within the Project's Geotechnical Engineering and Geotechnical Report. Additionally, Project plans would be reviewed and approved by the City prior to construction to ensure all Project improvements are geotechnically sound. Impacts are less than significant, and no mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. There are no existing septic tanks at the Project site. The use of septic tanks or alternative wastewater disposal systems is not proposed by the Project. Therefore, no impact would result, and no mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. The site is in the northeastern portion of the Los Angeles Basin within the Peninsular Ranges geomorphic province of California. The Peninsular Ranges are characterized by elongate structural blocks bounded by northwest to west-northwest trending fault zones. Several of these faults terminate at or merge with the east-west trending thrust faults at the southern edge of the Traverse Ranges geomorphic province to the north of the site.

The Project is consistent with the City requirements and designations for the site and does not propose a development resulting in land use of greater density, intensity than permitted under State Law, the General Plan, or the Municipal Code and would not allow new development on sites where such development is prohibited under State Law or the General Plan.

If excavation extends into native soils, and if grading activities encounter unknown paleontological resources, the Project Applicant (as a PDF) may retain a qualified Paleontologist to monitor during large areas of earth-moving activities, as needed. The potential impacts would be less than significant with the PDF, and no mitigation is required.

Regulatory Requirements

RR GEO-1 The Project shall be designed and constructed in compliance with the 2019 California Building Code (CBC) Design Parameters, or the most current CBC adopted in the City's Municipal Code.

RR GEO-2 Prior to issuance of a grading permit, the Project Applicant shall prepare an erosion control plan in compliance with City's Grading Ordinance, as approved by the City.

Mitigation Measures

Project implementation would not result in significant impacts related to Geology and Soils; therefore, no mitigation measures are required.

3.8 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Impact Analysis

Climate change refers to any significant change in measures of climate (e.g., average temperature, precipitation, or wind patterns) over a period of time. Climate change may result from natural factors, natural processes, and human activities that change the composition of the atmosphere and alter the surface and features of the land. Significant changes in global climate patterns have recently been associated with global warming, which is an average increase in the temperature of the atmosphere near the Earth's surface; this is attributed to an accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere which, in turn, increases the Earth's surface temperature. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through fossil fuel combustion in conjunction with other human activities are associated with global warming.

GHGs, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). General discussions on climate change often include water vapor, atmospheric ozone, and aerosols in the GHG category. Water vapor and atmospheric ozone are not gases that are formed directly in the construction or operation of development projects, nor can they be controlled in these projects. Aerosols are not gases. While these elements have a role in climate change, they are not considered by either regulatory bodies, such as CARB, or climate change groups, such as the California Climate Action Registry, as gases to be reported or analyzed for control. Therefore, no further discussion of water vapor, atmospheric ozone, or aerosols is provided.

Regulatory Background

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order (EO) S-3-05, which calls for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

The principal overall State plan and policy adopted for the purpose of reducing GHG emissions is Assembly Bill (AB) 32 (California Global Warming Solutions Act of 2006). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 recognizes that California is the source of substantial amounts of GHG emissions. The statute states the following:

Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

In order to avert these consequences, AB 32 establishes a State goal of reducing GHG emissions to 1990 levels by the year 2020, codifying the goal of EO S-3-05.

CARB approved a Climate Change Scoping Plan as required by AB 32 in 2008; this plan is required to be updated every five years. The Climate Change Scoping Plan proposes a “comprehensive set of actions designed to reduce overall carbon GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health” (CARB 2008). The Climate Change Scoping Plan has a range of GHG-reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation regulation to fund the program. On February 10, 2014, CARB released the Draft Proposed First Update to the Climate Change Scoping Plan (CARB 2014). The board approved the final First Update to the Climate Change Scoping Plan on May 22, 2014. The first update describes California’s progress towards AB 32 goals, stating that “California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32” (CARB 2014). The latest update occurred in January 2017 and incorporates the 40 percent reduction to 1990 emissions levels by 2030.

The Sustainable Communities and Climate Protection Act of 2008, Senate Bill (SB) 375, established a process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 required SCAG to incorporate a “sustainable communities strategy” (SCS) into its regional transportation plans (RTPs) that will achieve GHG emission reduction targets

though several measures, including land use decisions. SCAG's SCS is included in the SCAG 2016–2040 RTP/SCS (SCAG 2016). The goals and policies of the RTP/SCS that reduce vehicle miles traveled (VMT) focus on transportation and land use planning that include building infill projects; locating residents closer to where they work and play; and designing communities so there is access to high quality transit service.

On April 29, 2015, Governor Brown signed EO B-30-15, which ordered an interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. Five key goals for reducing GHG emissions through 2030 include (1) increasing renewable electricity to 50 percent; (2) doubling the energy efficiency savings achieved in existing buildings and making heating fuels cleaner; (3) reducing petroleum use in cars and trucks by up to 50 percent; (4) reducing emissions of short-lived climate pollutants; and (5) managing farms, rangelands, forests and wetlands to increasingly store carbon. EO B-30-15 also directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

On September 8, 2016, the Governor signed Senate Bill 32 (SB 32) to codify the GHG reduction goals of EO B-30-15, requiring the State to reduce GHG emissions by 40 percent below 1990 levels by 2030 (Health and Safety Code Section 38566). As stated above, this goal is expected to keep the State on track to meeting the goal set by EO S-3-05 of reducing GHG emissions by 80 percent below 1990 levels by 2050.

AB 197 was signed at the same time to ensure that the SB 32 goals are met by requiring CARB to provide annual reports of GHGs, criteria pollutants, and TACs by facility, City and sub-county level, and sector for stationary sources and at the County level for mobile sources. It also requires the CARB to prioritize specified emission reduction rules and regulations and to identify specified information for emission reduction measures (e.g., alternative compliance mechanism, market-based compliance mechanism, and potential monetary and nonmonetary incentive) when updating the Scoping Plan.

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are as follows:

1. To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources
2. To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation

The text of SB 350 sets a December 31, 2030, target for 50 percent of electricity to be generated from renewable sources. SB 350 also requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030. Additionally, SB 350 sets requirements for large utilities to develop and submit integrated resources plans (IRPs), which detail how utilities would meet their customers' resource needs, reduce GHG emissions, and integrate clean energy resources (CEC 2020a).

On September 10, 2018, Governor Brown signed SB 100, the 100 Percent Clean Energy Act of 2018. SB 100 requires renewable energy and zero-carbon resources to supply 100 percent of electric retail sales to end-use customers and 100 percent of electricity procured to serve state agencies by December 31, 2045. This policy requires the transition to zero-carbon electric systems that do not cause contributions to increase of GHG emissions elsewhere in the western electricity grid (CEC 2020b). SB 100 also creates new standards for the Renewable Portfolio Standard (RPS) goals established by SB 350 in 2015. Specifically, the bill increases required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by 2030.

Further, on September 10, 2018, Governor Brown also signed California EO B-55-18, which sets a new statewide goal of carbon neutrality as soon as possible, and no later than 2045 and achieve net negative emissions thereafter. EO B-55-18 was added to the existing Statewide targets of reducing GHG emissions, including the targets previously established by Governor Brown of reducing emissions to 40 percent below 1990 levels by 2030 (EO B-30-15 and SB 32), and by Governor Schwarzenegger of reducing emissions to 80 percent below 1990 levels by 2040 (EO S-3-05).

The City of West Covina does not currently have a Climate Action Plan; however, the City has adopted an Energy Action Plan (EAP). Therefore, the Project is evaluated against the City's EAP. The purpose of the EAP is to "guide the City of West Covina toward attainable conservation goals that may also significantly reduce the impact of greenhouse gas emissions within the community" (City of West Covina 2011). The goals of the City's EAP include: educating the public about energy-saving techniques and programs; promoting and creating energy conservation opportunities and programs; installing environmentally benign, renewable, and reliable energy facilities; participating in alliances with local businesses and with other agencies; pursuing and performing local and higher funding opportunities; and coordinating other City policies, programs, and ordinances to become compatible with Sustainable Community goals.

SCAQMD Significance Criteria

On December 5, 2008, the SCAQMD Governing Board presented the staff proposal for a tiered threshold approach wherein Tier 1 determines if a project qualifies for an applicable CEQA exemption, Tier 2 determines consistency with GHG reduction plans, and Tier 3 proposes a numerical screening value as a threshold. At their September 28, 2010, meeting, the Working Group suggested a Tier 3 threshold of 3,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year for all land use types (SCAQMD 2010). Tier 4 determines if the project meets performance standards. Tier 4 has three options: Option 1—percent emission reduction target; Option 2—early implementation of applicable measures, and Option 3—sector-based standard. Tier 5 determines mitigation for CEQA offsets.

In the absence of adopted thresholds, the Tier 3 standard is used for this analysis (SCAQMD 2008). The development of project-level thresholds in accordance with CEQA is an ongoing effort at the State, Regional, and County levels, and significance thresholds may differ for future projects based on new or additional data and information that may be available at that time for consideration. The City of West Covina has not officially adopted any GHG CEQA

significance threshold. The City defers to assessment methods and significance thresholds developed by the SCAQMD. This impact analysis evaluates consistency with regulatory programs designed to reduce GHG emissions and that contribute to the achievement of AB 32's and SB 32's goals as the primary significance criterion. In addition, this impact analysis also evaluates the Project's estimated emissions compared to the Tier 3 threshold (as discussed above) for impacts related to GHG emissions proposed by staff of the SCAQMD, but not adopted by the SCAQMD Board.

Would the Project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

Less Than Significant Impact. In developing methods for GHG impact analyses, there have been suggestions from local air pollution control districts of quantitative thresholds, often referred to as screening levels, which define an emissions level below which it may be presumed that climate change impacts would be less than significant. Neither the SCAQMD, the City of West Covina, nor the County of Los Angeles have adopted a significance threshold for GHG emissions from non-industrial development projects. Consequently, pursuant to the discretion afforded by Sections 15064.4(a) and 15064.4(b) of the State CEQA Guidelines, the impact of the Project's GHG emissions are assessed based on the methodologies proposed by SCAQMD's GHG CEQA Significance Threshold Working Group, as described above.

Based on the proposed construction activities described above, the principal source of construction related GHG emissions would be from internal combustion engines of construction equipment, on-road construction vehicles, and workers' commuting vehicles. GHG emissions from construction activities were obtained from the CalEEMod model, described above. The estimated construction GHG emissions for the proposed Project would be 65 MTCO₂e, as shown in Table 3-10, Estimated Greenhouse Gas Emissions from Construction.

**TABLE 3-10
ESTIMATED GREENHOUSE GAS EMISSIONS
FROM CONSTRUCTION**

Year	Emissions (MTCO₂e)
2025	128
2026	71
Total	199
MTCO ₂ e: metric tons of carbon dioxide equivalent Notes: - Totals may not add due to rounding variances. - Detailed calculations in Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data.	

Operational GHG emissions would come primarily from vehicle trips; other sources include electricity and water consumption; natural gas for space and water heating; and landscaping

and maintenance equipment. Table 3-11, Estimated Annual Greenhouse Gas Emissions from Project Operation, shows the annual GHG emissions from proposed Project's operations.

TABLE 3-11
ESTIMATED ANNUAL GREENHOUSE GAS
EMISSIONS FROM PROJECT OPERATION

Source	Emissions (MTCO₂e/yr)
Mobile	20
Area	<1
Energy	7
Water	1
Waste	<1
Refrig.	<1
Stationary	7
Total Operational Emissions	35
MTCO ₂ e/yr: metric tons of carbon dioxide equivalent per year	
Notes:	
- Totals may not add due to rounding variances. - Detailed calculations in Appendix A, Air Quality and Greenhouse Gas Emissions Modeling Data.	

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. In addition, GHG emission reduction measures for construction equipment are relatively limited. The SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime so that GHG reduction measures address construction GHG emissions as part of the operational GHG reduction strategies (SCAQMD 2008). Therefore, construction and operational emissions are combined by amortizing the construction and operations over an assumed 30-year project lifetime. This combination is shown in Table 3-12, Estimated Total Project Annual Greenhouse Gas Emissions, using the proposed Project's amortized construction and operational emissions.

TABLE 3-12
ESTIMATED TOTAL PROJECT ANNUAL
GREENHOUSE GAS EMISSIONS

Source	Emissions (MTCO₂e/yr^a)
Construction (Amortized)	7 ^a
Operations (Table 14)	35
Total^b	42
SCAQMD-Recommended Threshold (Tier 3)	3,000
Exceeds Threshold?	No
MTCO ₂ e/yr: metric tons of carbon dioxide equivalent per year	
^a Total derived by dividing construction emissions (see Table 3-10) by 30.	
^b Total annual emissions are the sum of amortized construction emissions and operational emissions.	

It is noted that there are no established applicable quantitative federal, State, regional, or local CEQA significance criteria for GHG emissions for non-industrial projects in the SoCAB. The SCAQMD has proposed, but not adopted, a threshold of 3,000 MTCO₂e per year for non-industrial land use projects. As shown, the estimated GHG emissions from the Project would be less than this suggested threshold. The impact would be less than significant, and no mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. As discussed previously, the City of West Covina has adopted standards for the purpose of reducing energy consumption, which would result in a reduction in GHG emissions. The State policy and standards adopted for the purpose of reducing GHG emissions that are applicable to the proposed Project are EO S-3-05, AB 32, the California Global Warming Solutions Act of 2006, and SB 32. The quantitative goal of these regulations is to reduce GHG emissions to 1990 levels by 2020 to 80 percent below 1990 levels by 2050, and for SB 32, to 40 percent below 1990 levels by 2030. Statewide plans and regulations (such as GHG emissions standards for vehicles, the Low Carbon Fuel Standard, Cap-and-Trade, and renewable energy) are being implemented at the statewide level, and compliance at a project level is not addressed.

As stated above, the City adopted the Energy Action Plan (EAP) to identify the City's long-term strategies and commitment to achieve energy efficiency in the community and in City operations. However, the EAP does not include requirements or standards for implementation of energy reduction to development projects. Table 3-13, below, shows the applicable EAP policies applicable to the Project and the Project's consistency with these policies.

TABLE 3-13
ENERGY ACTION PLAN CONSISTENCY

Energy Action Plan Policy	Project Consistency Analysis
Modify the City's lighting standards to encourage the application of "Dark Skies" goals (discourage excessive and spill-over lighting).	Consistent. The Project would comply with all City development standards and zoning ordinances governing residential lighting.
Promote energy and water conservation design features in all major renovation and development projects.	Consistent. The Project is designed to meet current Title 24 Standards at the time of Building Permit Review. The regulation of energy efficiency for residential and non-residential structures is established by the CEC and its California Energy Code. Starting on January 1, 2020, all new single-family residential uses will be required to offset their annual electrical demand through the use of energy efficiency and solar photovoltaic panels.
Encourage the efficient use of water and reduce urban runoff through the use of natural drainage, drought tolerant landscaping, and efficient irrigation systems in major renovation and new development projects. Recommend the incorporation of these practices within the approval processes of other local and regional departments and jurisdictions.	Consistent. The Project would meet current California Green Building Standards Code (CALGreen Code) for indoor water use.
Source: City of West Covina 2011.	

As shown in Table 3-13, the Project is consistent with applicable EAP policies. The Project would be built to meet the current applicable Title 24 Energy Efficiency Standards for Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6) and the applicable CALGreen Code (24 CCR 11).

The regulations, plans, and policies adopted for the purpose of reducing GHG emissions that are directly applicable to the Project include the 2022 Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings and the Title 24 California Green Building Standards Code (CALGreen) (RR ENE-1). The Energy Code contains energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. In addition, the 2022 Energy Code encourages energy efficient approaches to foster building decarbonization, emphasizing heat pumps for space heating and water heating. The 2022 Energy Codes also extends the benefits of photovoltaic and battery storage systems and other demand flexible technology to work in combinations with heat pumps to enable California buildings to be responsive to climate change. This Energy code also strengthens ventilation standards to improve indoor air quality. This 2022 update provides crucial steps in the state's progress toward 100 percent clean carbon neutrality by midcentury. Lastly, the requirements of the energy efficiency standards will result in the reduction of natural gas and electricity consumption. Since natural gas use produces GHG emissions, a reduction in natural gas consumption results in a related reduction in GHG emissions (CBSC 2022a).

The CALGreen Code provides standards for bicycle parking; carpool/vanpool/electric vehicle spaces; energy-efficient appliances; renewable energy; graywater systems; water efficient plumbing fixtures; recycling and recycled materials; pollutant controls (including moisture control and indoor air quality); storm water management; building design; insulation; flooring; and framing, among others. Implementation of the CALGreen Code measures reduces energy consumption and vehicle trips and encourages the use of alternative-fuel vehicles which, in turn, reduces GHG emissions (CBSC 2022b).

These codes are enforced by the City, and adherence to standard requirements for construction and operations would ensure that the Project would comply with both regulations. Therefore, through implementation of the State regulations mentioned above, the Project would be consistent with the City's Energy Action Plan.

Overall, the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. The impact would be less than significant, and no mitigation is required.

Regulatory Requirements

RR ENE-1, in Section 4.6, Energy, would be applicable to this topic.

Mitigation Measures

Project implementation would not result in significant impacts related to GHG Emissions; therefore, no mitigation measures are required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
result in a safety hazard or excessive noise for people residing or working in the project area?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Impact Analysis

Would the Project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Construction activities for the proposed Project would involve the use of chemical substances such as solvents, paints, fuel for equipment, and other potentially hazardous materials. Hazards to the environment or the public may occur with the transport, use, storage, or disposal of hazardous materials. However, construction activities would be relatively short-term and the transport, use, and disposal of hazardous materials as part of these activities would be temporary. The contractor would be required to comply with existing regulations for the transport, use, storage and disposal of hazardous materials to prevent public safety hazards. These regulations include the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act (RCRA), California Hazardous Waste Control Act (HWCA), and California Accidental Release Prevention Program (CalARPP), among others.

Once constructed, the proposed residence would not utilize, store, or generate hazardous materials or wastes in quantities that would pose a significant hazard to the public. Impacts would be less than significant, and no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. As discussed above, the Project would involve clearing of existing vegetation, grading of the existing hillside, and the construction of a two-story single-family residence with a subterranean garage, a detached garage with a second-story ADU, and related site improvements. Based on review of historical imagery, the Project site has never undergone development, and no buildings or structures have existed on the site. In the absence of previous activities, presence of previous or current hazardous materials or wastes is not anticipated. The site is undeveloped and covered with vegetation; no trash and waste materials or evidence of a recognized environmental condition (REC) are observed on

the site based on aerial imagery. Additionally, in the absence of any structures on the site that would be demolished, no potential for presence of asbestos-containing materials (ACM) and lead-based paint (LBP) is anticipated. Impacts would be less than significant, and no mitigation is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. There are no existing schools located within a 0.25-mile radius of the Project site. The nearest schools to the Project site are South Hills High School, located at 645 Barranca Street approximately 0.81 mile northwest of the site and Mesa Elementary School, located at 409 S. Barranca Avenue approximately 1.0-mile northwest of the site.

Due to the distance between the Project site and the nearest schools, the Project would not expose children at these nearby schools to hazardous substances through accidental releases during construction activities. While a potential exists for the accidental release or spill of hazardous substances such as gasoline, oil, hydraulic fluid, diesel fuel, or other liquids during construction, operation, and maintenance activities, use of these materials would be in limited quantities as typical during the operation and maintenance of construction equipment and would be conducted in compliance with applicable federal, State, and local regulations. Additionally, the contractor would be required to use standard construction controls and safety procedures, which would avoid and minimize the potential for accidental release or spill of such substances into the environment. Because no schools are within 0.25 miles of the Project site, the level of risk associated with the accidental release of hazardous substances during construction would be less than significant, and no mitigation is required.

Residential activities associated with occupancy of the proposed residence would be similar to other residential uses surrounding the site and would not generate hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste in quantities that would result in an impact. There would be a less than significant impact, and no mitigation is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. According to a review of the California Department of Toxic Substances Control (DTSC) Hazardous Waste and Substances Site List – Site Cleanup (Cortese List) (DTSC 2024), the Project site is not included on a list of hazardous material sites compiled pursuant to California Government Code Section 65962.5. Therefore, the Project does not have the potential to create a significant hazard to the public or the environment due to presence of an existing hazardous materials site identified on the Cortese List. No impact would occur, and no mitigation is required.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?***

No Impact. The Project site is not located within two miles of an airport. The nearest public airports are the San Gabriel Valley Airport (formerly El Monte Airport), located approximately 9 miles northwest of the Project site, and the Brackett Field Airport, located approximately 5 miles northeast of the Project site.

West Covina is not within the San Gabriel Valley Airport Influence Area, as defined by the Los Angeles County Airport Land Use Plan (Los Angeles County ALUC 1991). Similarly, West Covina is not within the Brackett Field Airport Influence Area, as defined by the Brackett Field Airport Land Use Compatibility Plan (Los Angeles County ALUC 2015). Thus, the Project would not result in a safety hazard or excessive noise for people residing on the site, as it relates to exposure to airport or aircraft hazards in areas within an airport land use plan or within two miles of a public airport. No impact would occur, and no mitigation is required.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less Than Significant Impact. The City of West Covina has a Natural Hazard Mitigation Plan (NHMP) which addresses natural hazards, risks, and mitigation actions for the City. It establishes a framework for proactive local planning for natural hazard mitigation, per the federal Disaster Mitigation Act of 2000. The nearest designated disaster route to the Project site is East Cameron Avenue, which is approximately 200 feet north of the site (LACPW 2008). The nearest designated freeway disaster route is I-10 freeway, located 1.1-mile north of the Project site. Temporary lane closures on adjacent streets (East Cameron Avenue and the neighborhood access road at the eastern boundary of the Project site) may be required during the short-term construction period in order to connect the proposed Project to the existing utility infrastructure within these roadways. However, Project construction would not involve full closure of any public roadway during construction. Implementation of traffic control measures during construction in accordance with Chapter 19, Article X, Section 19-302, Standard Specifications for Public Works Construction, of WCMC, which adopts the Greenbook by reference (see RR HAZ-1), would further reduce the potential for traffic hazards and the obstruction of access to adjacent parcels. Additionally, despite potential lane closures during construction, with compliance with the NHMP, impacts would be less than significant, and no mitigation is required.

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

Less Than Significant Impact. The Project site and the surrounding areas are located in a designated Very High Fire Hazard Severity Zone (VHFHSZ), as identified by the California Department of Forestry and Fire Prevention (CalFire). However, the proposed Project is similar in land use and compatible with the surrounding residential development and would not significantly increase hazards related to the risk of loss, injury, or death involving

wildland fires more so than existing conditions. Additionally, the West Covina Fire Prevention Bureau of the West Covina Fire Department (WCFD) provides technical review of all building construction plans within the City to ensure proposed buildings meet the City's adopted 2022 California Fire Code, 2022 California Building Code, California Health and Safety Code, and WCMC standards prior to construction. Therefore, the Project would have a less than significant impact, and no mitigation is required.

Regulatory Requirements

RR HAZ-1 All construction on public rights-of-way shall include the implementation of traffic control measures in accordance with the West Covina Municipal Code Chapter 12.20, Street Excavation, and Chapter 19, Article X, Section 19-302, Standard Specifications for Public Works Construction, which adopts the Greenbook by reference.

Mitigation Measures

Project implementation would not result in significant impacts related to Hazards and Hazardous Materials; therefore, no mitigation measures are required.

3.10 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv) impede or redirect flood flows?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. Implementation of the Project would involve removal of existing vegetation, grading of the existing hillside, and construction of the proposed two-story residence, detached garage with a second-story ADU, and site improvements including landscaping and hardscaping. Therefore, the Project has the potential to result in short-term construction impacts to surface water quality from demolition, grading, and construction-related activities. Storm water runoff from the construction site would contain loose soils, organic matter, and sediments. Spills or leaks from heavy equipment and machinery, such as fuel, oil and grease, and heavy metals, could also enter the runoff. Building construction would involve the use of hazardous materials (e.g., paints, solvents, cleansers) that, if not properly handled, may enter the stormwater runoff.

The Clean Water Act (CWA) establishes a framework for regulating potential water quality impacts from construction activities, as well as new development and major redevelopment, through the NPDES program. Construction activities that disturb one acre or more of land are required to obtain an NPDES permit or coverage under the NPDES Construction General Permit. The Construction General Permit requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance best management practices (BMPs) to reduce the potential for soil and wind erosion during construction activities. Coverage under the NPDES Construction General Permit and implementation of the Project's SWPPP (see RR HYD-1) would ensure that short-term, construction-related water quality impacts would be less than significant. No mitigation is required.

Stormwater pollutants that would be generated by the Project in the long-term include sediment, trash and debris, oil and grease, bacterial indicators, nutrients, and pesticides that would come from landscaped areas, drive aisles, parking areas, and outdoor residential activities. In accordance with the NPDES program and Section 9.36, Control of Pollutants from New Developments/Redevelopment Projects, of the WCMC, the Project Applicant would be required to prepare and implement a standard urban stormwater mitigation plan (SUSMP) (RR HYD-2). The City would review and approve the SUSMP prior to construction

and operation of the Project. The SUSMP would include low impact development, structural and non-structural BMPs and source control BMPs. Compliance with RR HYD-1 and RR HYD-2 would reduce the risk of water degradation from soil erosion and other pollutants related to construction activities, and potential violations of water quality standards would be minimized through required BMPs. Therefore, the Project would not violate water quality standards or waste discharge requirements. Impacts would be less than significant, and no mitigation is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?

Less Than Significant Impact. The Project would not involve direct or indirect withdrawals of groundwater. Domestic water service would be provided by the Suburban Water Systems, as described in Section 4.19, Utilities and Service Systems. According to the Project's Geotechnical Report, groundwater, seeps, seepage or springs and/or static surface streams were not observed in any of the exploration or surficial during subsurface investigation and is not expected to be a significant constraint during construction in the drier seasons. Therefore, there would be minimal change in groundwater recharge; impacts would be less than significant, and no mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

Less Than Significant Impact. As discussed previously, the Project would be required to obtain an NPDES permit for construction activities or coverage under the NPDES Construction General Permit. The Construction General Permit requires preparation of a SWPPP and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance BMPs to reduce the potential for soil and wind erosion during construction activities (RR HYD-1). Further, the proposed Project must comply with the City's grading ordinance, which requires preparation of an erosion and sediment control plan for City approval prior to issuance of a grading permit (RR GEO-2). With compliance with these regulations, construction-related erosion would be less than significant, and no mitigation is required.

There would be minimal areas of exposed soils following completion of the proposed Project where erosion could occur. Site improvements and landscaping would prevent long-term erosion (RR HYD-2). Therefore, operation-related erosion would be less than significant, and no mitigation is required.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

No Impact. The Project site will be graded from a large, sloped terrain to several smaller terraced pads. Within the pads, all area drainage will be controlled and

mitigated through a series of large planters and gardens. In light of the proposed design the surface runoff would be reduced and used to irrigate the landscaped areas prior to exiting the site. Therefore, the Project would not result in flooding on- or offsite due to the increased runoff. No impacts would occur, and no mitigation is required.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

No Impact. The surface runoff will be utilized for irrigation through the planters and gardens before exiting the Project site and entering the municipal drainage channel. Therefore, the Project runoff would not exceed the capacity of the stormwater drainage system nor create additional sources of polluted runoff. No impacts would occur, and no mitigation is required.

iv) impede or redirect flood flows?

Less Than Significant Impact. FEMA designates most of West Covina as Zone X, which is an area subject to flooding from the 500-year flood (0.2 percent annual chance of flooding) (FEMA 2020).

Implementation of temporary and permanent erosion control BMPs in the Project's SWPPP and SUSMP (see RR HYD-1 and RR HYD-2) would ensure that substantial erosion or siltation would not occur on- or off-site during short-term construction and long-term occupancy of the dwelling units. Thus, the Project would not result in erosion or siltation that would alter the drainage pattern of the area. Project impacts would be less than significant, and no mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. A seiche is the resonant oscillation of a body of water caused by earthquake shaking (waves). Seiche hazards exist where groundshaking causes water to splash out of the body of water and inundate nearby areas and structures. The site is not located near a large body of water that may be subject to seiche.

Tsunamis are seismic sea waves generated by undersea earthquakes or landslides. The City of West Covina is not located along the coast, and the Project site is approximately 33 miles from the Pacific Ocean. As a result, no impacts related to seiche, tsunami, or flood hazards would occur, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As discussed above in Response 4.10a, the Project would comply with applicable water quality regulations for short-term and long-term impacts. Specifically, the Project would have coverage under the NPDES Construction General Permit and implementation of the Project's SWPPP (see RR HYD-1) would ensure that short-term, construction-related water quality impacts would be less than significant. For long-term

water quality impacts, in accordance with the NPDES program and Section 9.36, Control of Pollutants from New Developments/Redevelopment Projects, of the WCMC, the Project would be constructed and operated in accordance with the SUSMP, prepared for the Project and approved by the City (see RR HYD-2). Thus, with implementation of permanent BMPs in the SUSMP, the Project site would generate less stormwater pollutants than under existing conditions.

There are no groundwater wells on the Project site, and no wells are proposed as part of the Project. The proposed Project would not involve direct withdrawals of groundwater, nor would it interfere with groundwater recharge such that it would result in a net deficit in aquifer volume or lowering of the local groundwater table levels. Excavation activities would not extend into the underlying groundwater at the Project site. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts are less than significant, and no mitigation is required.

Regulatory Requirements

RR HYD-1 Prior to demolition and construction activities on the site, the Contractor shall prepare and file a Permit Registration Document (PRD) with the State Water Resources Control Board in order to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2009-009-DWQ, NPDES No. CAS000002) or the latest approved Construction General Permit. The PRD shall consist of a Notice of Intent (NOI); a Risk Assessment; a Site Map; a Storm Water Pollution Prevention Plan (SWPPP); an annual fee; and a signed certification statement. Pursuant to permit requirements, the Project Applicant/Developer shall implement the Best Management Practices (BMPs) in the SWPPP to reduce or eliminate construction-related pollutants in site runoff. The BMPs shall be implemented during all demolition and construction activities on the site.

RR HYD-2 In accordance with Section 9.36, Control of Pollutants from New Developments/Redevelopment Projects, of the West Covina Municipal Code, the Project shall be constructed and operated in accordance with the standard urban stormwater mitigation plan (SUSMP) prepared for the Project and approved by the City.

Mitigation Measures

Project implementation would not result in significant impacts related to Hydrology and Water Quality; therefore, no mitigation measures are required.

3.11 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Impact Analysis

Would the Project:

a) Physically divide an established community?

No Impact. The Project site is undeveloped and currently zoned for single-family residential (R-1) and is surrounded by other single-family residential uses, as well as City recreational and public facility uses. The proposed Project would be compatible with the adjacent residential communities. Therefore, the Project would not have the potential to divide an established community, as none exists on the site. Additionally, it would not disrupt the physical arrangement of the existing adjacent residential neighborhoods and would rather serve as an extension of existing residential area. No impact would occur, and no mitigation is required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The Project site is in a developed residential area of the City; thus, the Project would be compatible with existing uses. No potential land use conflict would occur.

Local plans and programs relevant to the Project and the consistency of the proposed Project with these plans and programs are discussed below.

City of West Covina General Plan

The City of West Covina General Plan, PlanWC, was adopted by City Council in December 2016 (City of West Covina 2016a). PlanWC is organized into the following elements: (1) Our Natural Community (Conservation/Open Space), (2) Our Prosperous Community (Economic Development), (3) Our Well Planned Community (Land Use/Design, Housing, Parks and Recreation), (4) Our Accessible Community (Circulation), (5) Our Resilient Community (Land Use), (6) Our Healthy and Safe Community (Public Health, Safety, Noise, and Land Use), (7) Our Active Community (Land Use, Open Space, Parks and Recreation), and (8) Our Creative Community (Culture). The 2nd draft Housing Element (2021-2029 Housing

Element) was adopted on November 15, 2022 and is currently in the process of being revised in the 4th draft. Each element contains the City's goals and policies related to that element.

The Project site has a General Plan land use designation of NL (Neighborhood – Low Density). This land use designation provides sites for detached houses with some attached units in a small mix of building types from 0 up to 8 dwelling units per acre (City of West Covina 2016a). The NL land use designation permits the proposed use of the Project site for a two-story single-family residential building with basement, detached garage with a second-story accessory dwelling unit, and subterranean garage. Therefore, the Project would not have the potential to conflict with the land use designation specified in the General Plan for the site.

**TABLE 3-14
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS**

General Plan Goal/Policy/Action		Consistency Analysis
Goal—Our Natural Community		
Air—Policy 1.3	Minimize the adverse impacts of growth and development on air quality and climate.	Consistent. As discussed in Section 4.3, Air Quality, and 4.8, Greenhouse Gas Emissions, the Project's emissions would be less than the SCAQMD's thresholds for air quality and GHG emissions. Through compliance with RR AQ-1, for fugitive dust control, RR AQ-2, for nuisance emissions, and RR ENE-1, Title 24 Energy Efficiency Standards, the Project would minimize adverse impacts of the Project on air quality and climate.
Water—Policy 1.5	Where appropriate, new development shall minimize impervious area, minimize runoff and pollution, and incorporate best management practices.	Consistent. As discussed in Section 4.10, Hydrology and Water Quality, the Project would minimize runoff and pollution of water through the preparation of a SWPPP and implementation of erosion control, sediment control, tracking, waste management, and construction site maintenance BMPs to reduce the potential for soil and wind erosion during construction activities (see RR HYD-1, in Section 4.10). Therefore, the Project would be consistent with this Policy.
Access to Nature—Policy 1.9	During the review of public and private development projects, analyze potential impacts to views of natural areas from public streets, parks, trails, and community facilities.	Consistent. As discussed in Section 4.1, Aesthetics, of this Initial Study, potential impacts to natural views, including views of the San Juan Hills are analyzed from public areas surrounding the Project site. Impacts to public views would be less than significant.
Goal—Our Well Planned Community		
Policy 3.6	Reduce West Covina's production of greenhouse gas emissions and contribution to climate change, and adapt to the effects of climate change.	Consistent. As discussed in Section 3.8, Greenhouse Gas Emissions, the Project's emissions would be less than the SCAQMD's recommended thresholds GHG emissions. Through compliance with RR ENE-1, Title 24 Energy Efficiency Standards, the Project would minimize GHG emissions. The Project's proposed single-family use is required to offset annual electrical demand through the use of energy efficiency and solar photovoltaic panels. The Project is expected to reduce energy use by more than 50 percent. This reduction of energy use would consequently reduce GHG emissions, thereby reducing West Covina's contribution to climate change.
Action 3.6	Key land use adaptation strategies to reduce greenhouse gas emissions are: Promoting transit-oriented infill development and Providing incentives for high-performance buildings and infrastructure.	

TABLE 3-14
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goal/Policy/Action		Consistency Analysis
Goal—Our Resilient Community		
Energy—Policy 5.6	Continue existing beneficial energy conservation programs, including adhering to the California Energy Code in new construction & major renovations.	Consistent. The Project would comply with RR ENE-1, which is Title 24 of the California Energy Commission (CEC) code. The 2022 Title 24 Energy Efficiency Standards for residential buildings include requirements such as installation of solar photovoltaic systems, including smart inverters with optional battery storage. Additionally, residential uses are required to have updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); ventilation requirements; and lighting requirements.
Goal—Our Healthy and Safe Community		
Active Living—Policy 6.2	New and renovated buildings should be designed and constructed to improve the health of the residents, workers, and visitors.	Consistent. As stated above, the Project would comply with RR ENE-1. Under the 2022 Title 24 Energy Efficiency Standards, residential uses are required to have updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); ventilation requirements; and lighting requirements. Adherence with RR ENE-1 would ensure consistency with this policy.
Natural Hazard—Action 6.15a	Require all development to comply with the provisions of the latest California Building Code, including provisions related to design and engineering to mitigate potential impacts from seismic events, fires, and other hazards.	Consistent. The Project would comply with the provisions of the latest adopted California Building Code. Impacts from seismic fires, and other hazards are analyzed within this Initial Study. All impacts would be less than significant for the Project.
Noise—Action 6.23a	Require new developments to reduce exterior noise levels for any usable outdoor area to the “normally acceptable” range in the City’s land use/noise compatibility matrix, shown in Table 6.4 of this Noise Element.	Consistent. The Project would result in the generation of construction noise that exceeds the thresholds of significance established by the City. Nevertheless, construction noise is considered to be temporary in nature, and noise levels generated during Project construction would likely be lower than what was modeled as the construction noise model assumes construction equipment would be operating simultaneously. Project impacts would be considered potentially significant and further analysis and/or mitigation would be required.
Noise—Action 6.23c	Require any residential component of all new buildings to comply with the requirements of the residential noise insulations standards of the most recent edition of California’s building code.	Consistent. The Project would be required to comply with residential noise insulation standards of the California Building Code.
Noise—Policy 6.24	Ensure that new development does not expose surrounding land uses to excessive noise.	Consistent. Once occupied, noise generated onsite would be derived from sources such as HVAC units; residents talking/interacting/playing; vehicles travelling to the site; trash

TABLE 3-14
PROPOSED PROJECT GENERAL PLAN CONSISTENCY ANALYSIS

General Plan Goal/Policy/Action		Consistency Analysis
Noise—Action 6.24	Through the environmental review process, require applicants for new development proposals to analyze potential noise impacts on nearby noise-sensitive receivers before project approval. As feasible, require appropriate noise mitigation to address any identified significant noise impacts.	collection; and pool filtration units, among other sources. These sources of noise are typical for residential land use and all equipment would be required to comply with City codes. In addition, the site’s topography and distance between future sources of noise and adjacent noise sensitive receptors would help attenuate noise as it propagates throughout the site. As a result, operational/occupational noise is anticipated to be less than significant. As stated previously, Project construction may result in impacts that would be considered potentially significant and further analysis and/or mitigation would be required.
Noise—Policy 6.25	Minimize noise conflicts between local noise generators and sensitive receivers.	Consistent. As described in Section 4.13, Noise, the Project would have less than significant impacts for generation of noise in excess of noise standards. Sensitive receptors to the north and west of the site would not be subject to significant noise or vibration impacts. Additionally, the Project is subject to the City’s noise ordinance, and would be comply with its requirements, per RR NOI-2.
Noise—Action 6.25a	Continue to enforce the City’s existing Noise Ordinance.	
Housing Element		
Goal 2	Provide a variety of housing types to accommodate all economic segments of the City	Consistent. The intent of this goal is to assist in the provision of adequate housing to meet the needs of the community, including the needs of both renter and owner households. The Project implements this goal by providing residential development. The Project would be compatible with the surrounding neighborhoods and provides housing opportunities within the City.
Goal 5	Identify adequate sites to achieve housing variety	Consistent. The Project would be consistent with this goal by creating detached single family residential and attached ADU housing options at the Project site.
Policy 5.1	Provide for a range of residential development types in West Covina, including low density single-family homes, moderate density townhomes, higher density multi-family units, and residential/commercial mixed use in order to address the City’s share of regional housing needs.	
Source: City of West Covina 2016a, City of West Covina 2016c.		

As demonstrated in Table 3-14, the Project would be consistent with the applicable and relevant General Plan goals, policies, and actions. Therefore, in light of the above, there would be no conflict with the goals and policies of the General Plan or the land use designation for the site.

West Covina Zoning Code

The West Covina Zoning Code is the primary tool for implementing the General Plan. The Zoning Code provides development standards (i.e., setbacks, building height, site coverage, parking, and sign requirements) for development in all areas of the City.

The Project site is currently zoned Residential Single-Family (R-1). The Project components (i.e., one two-story single-family building with basement, one detached garage with a second-story accessory dwelling unit, one subterranean garage, and associated driveways and courtyards) are consistent with the standards, specified in Chapter 26 Article VIII of the City's Municipal Code (City of West Covina 2024a). Therefore, the Project would not conflict with the current zoning designation and requirements.

In light of the above analysis, the Project would not cause a significant environmental impact, as the Project would not conflict with any land use plan, policy, or regulation, including the City's General Plan and Zoning. No impact would occur.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Land Use and Planning; therefore, no mitigation measures are required.

3.12 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact Analysis

Would the Project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The California Geological Survey (CGS) designates Mineral Resources Zones (MRZs) according to the presence of or potential for underlying mineral resources. MRZ-1 is an area with no significant mineral deposits; MRZ-2 is an area with significant mineral deposits; and MRZ-3 is an area containing known mineral resources of undetermined significance. The Project site is not located within an MRZ (DOC 2010), and there are no areas within the City of West Covina containing known mineral resources appropriate for mineral extraction. Thus, there would be no loss of availability of known mineral resources or locally important mineral resource recovery sites (City of West Covina 2016a).

There are no past or ongoing oil or gas drilling activities on or near the site. Review of the California Division of Oil, Gas, and Geothermal Resources' (DOGGR's) Well Finder shows no oil or gas wells are located on the Project site or in the vicinity of the site. The nearest well is a dry, plugged hole approximately 0.56 miles southeast of the site (DOGGR 2024). Therefore, the Project would not result in the loss or availability of regional mineral resources. In addition, there are no mining activities on or near the site. No impacts would occur, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Mineral Resources; therefore, no mitigation is required.

3.13 NOISE

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Terms and Definitions

Noise and Vibration Metrics

Several rating scales (or noise “metrics”) are used to analyze the effects of noise on a community. These scales include the equivalent noise level (Leq) and the community noise equivalent level (CNEL). Average noise levels over a period of minutes or hours are usually expressed as A-weighted decibels (dBA) Leq, which is the equivalent noise level for that period of time. The period of time averaging may be specified where Leq (3) would be a 3-hour average. When no period is specified, a 1-hour average is assumed. Noise of short duration (i.e., substantially less than the averaging period) is averaged into ambient noise during the period of interest. Thus, a loud noise lasting several seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

To evaluate community noise impacts, CNEL was developed to account for human sensitivity to evening and nighttime noise. CNEL separates a 24-hour day into three periods: daytime (7:00 AM to 7:00 PM), evening (7:00 PM to 10:00 PM), and nighttime (10:00 PM to 7:00 AM). The evening sound levels are assigned a an approximately 5-dBA penalty, and the nighttime sound levels are assigned a 10-dBA penalty prior to averaging them with daytime hourly sound levels.

Several statistical descriptors are also often used to describe noise, including Lmax and Lmin, which are the highest and lowest A-weighted sound levels that occur during a noise event, respectively.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean square (RMS) vibration velocity. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV and RMS vibration velocity are normally described in inches per second (in/sec). Similar to airborne sound, vibration velocity can be expressed in decibel notation as vibration decibels (VdB).

Sensitive Receptors

Noise-sensitive receptors are generally considered to be humans who are engaged in activities that may be subject to the stress of significant interference from noise. These would include residents in the vicinity of the Project site that may be sleeping, resting, or involved in other activities that are not conducive to loud noise.

Regulatory Setting

California Department of Transportation

There are no applicable City standards for structural damage from vibration. The California Department of Transportation (Caltrans) vibration damage potential guideline thresholds are shown in Table 3-15.

**TABLE 3-15
VIBRATION DAMAGE THRESHOLD CRITERIA**

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50
ppv: peak particle velocity; in/sec: inch(es) per second. Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Source: Caltrans 2020.		

City of West Covina General Plan

The City of West Covina is affected by several different sources of noise, including automobile traffic, commercial activity, and periodic nuisances such as construction, loud parties, and other events. The Noise Element of the City's General Plan (PlanWC) is intended to identify these sources and provide objectives and policies that ensure that noise from these sources does not create an unacceptable noise environment (City of West Covina 2016a). Consistency with the applicable noise-related Policies and Actions of the General Plan are demonstrated in Table 3-14 of Section 3.11, Land Use and Planning. In Part 2, Chapter 6 of the PlanWC entitled "Our Healthy and Safe Community", Section E comprises the City's "Noise Element" and contains guidelines for noise compatible land uses for long-term operations as shown in Table 3-16, General Plan Land Use/Noise Compatibility Matrix.

Policy P6.24 of the General Plan requires that new development not expose surrounding land uses to excessive noise. City's required action related to this policy is as follows:

"Through the environmental review process, require applicants for new development proposals to analyze potential noise impacts on nearby noise-sensitive receivers before project approval. As feasible, require appropriate noise mitigation to address any identified significant noise impacts."

TABLE 3-16
GENERAL PLAN LAND USE/NOISE COMPATIBILITY MATRIX

Land Use Category	Community Noise Exposure L _{dn} or CNEL, DBA						
	55	60	65	70	75	80	85
Residential – Low density single family, duplex, mobile homes							
Residential – Multi-family							
Transient Lodging – Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							
Normally Acceptable			Normally Unacceptable				
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirement.			If new construction or development proceeds, an analysis of the noise reduction requirements should be made and needed noise insulation features included in the design.				
Conditionally Acceptable			Clearly Unacceptable				
New construction or development should be undertaken after an analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.			New construction or development should generally not be undertaken, unless it can be demonstrated that an interior level of 45 dBA can be achieved.				
Source: City of West Covina 2016a.							

City of West Covina Noise Ordinance

The City Municipal Code (Chapter 15, Article IV, Noise Regulations) is the City's Noise Ordinance. West Covina's Noise Ordinance does not contain quantitative standards. However, it is the City's policy "*...in the exercise of its police power, to regulate and control annoying noise levels from all sources. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interest shall be systematically proscribed.*" The following sections of the Noise Ordinance are applicable to the proposed Project:

Sec. 15-85 – Loud, unnecessary noise prohibited generally.

Notwithstanding any other provision of this article, it shall be unlawful for any person within any residential zone of the city to willfully make or continue or cause to be made or continued, any loud, unnecessary or unusual noise which unreasonably disturbs the peace and quiet of any residential neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. If the noise which is being created is plainly audible at a distance of fifty (50) feet from the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle in which it is located, it shall be presumed that the noise being created is in violation of the provisions of this section.

Sec. 15-94 – Radios, television sets, and similar devices.

Between the hours of 10:00 p.m. on one day and 7:00 a.m. of the following day, it shall be unlawful for any person within any residential zone of the city to use or operate any radio receiving set, musical instrument, phonograph, television set, or other machine or device for the producing or reproducing of sound or any device by which voice, music, or any other sound is amplified, in such a manner as to create any noise which causes the noise level at the property line of any property (or if a condominium or apartment house, within any adjoining unit or apartment), building, structure or vehicle to be plainly audible at a distance of fifty (50) feet therefrom.

Sec. 15-95 – Construction and building projects.

(a) Regulation. Between the hours of 8:00 p.m. of one day and 7:00 a.m. of the next day, it shall be unlawful for any person within a residential zone, or within a radius of five hundred (500) feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist, or other construction type device in such manner as to create any noise which causes the noise level at the property line to exceed the ambient noise level by more than five (5) decibels unless a permit therefore has been duly obtained in accordance with paragraph (b) of this section. No permit shall be required to perform emergency work as defined in section 15-83 of this article.

(b) Permit procedure. A permit may be issued authorizing noises prohibited by this section whenever it is found that the public interest will be served thereby.

Applications for permits shall be in writing, shall be accompanied by an application fee in the amount of five dollars (\$5.00), and shall set forth in detail facts showing that the public interest will be served by the issuance of such permit. Applications shall be made to the building director; provided, however, that, with respect to work upon or involving the use of a public street, alley, building, or other public place under the jurisdiction of the engineering department, applications shall be made to the city engineer. Anyone dissatisfied with the denial of a permit may appeal to the council.

- (c) Unloading and Loading. Between the hours of 8:00 p.m. of one day and 6:00 a.m. of the next day, it shall be unlawful for any person within the radius of five hundred (500) feet of generally occupied residences to unload, load or otherwise perform duties preparatory to the commencement of construction or repair work on buildings or structures. Generally occupied residences shall include, but not be limited to, areas in which there is a reasonable probability of occupancy within the area.

Sec. 15-97. - Restrictions on the operation of two- and four-stroke engines.

- (a) Regulation. Between the hours of 8:00 p.m. and 8:00 a.m. of the next day, it shall be unlawful for any person within a residential zone to operate any gasoline-powered two- or four-stroke engine such as a leaf blower, lawn mower, edger, chain saw, roto-tiller, and other such devices for the purpose of maintaining a lawn or property.

Impact Analysis

Would the Project:

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

Less Than Significant Impact.

Construction Noise

On-site Construction Equipment Noise

The development of the proposed Project would entail construction, which includes noise generated from site preparation activities; grading/excavation; building construction; paving, and the application of architectural coatings. The analysis of construction noise involved the modeling of typical and highest construction noise levels using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) Version 1.1, which allows for quantification of noise levels emanating from individual machinery. Typical noise levels represent the noise levels that would typically occur during construction and were calculated using the distance between the closest noise sensitive uses/receptors and the center of the Project Site. The degree to which noise-sensitive receptors are affected by noise from construction activities depends heavily on their proximity.

On September 29, 2020, Psomas confirmed with the City of West Covina Planning Department that the City has adopted a construction noise threshold of 80 dBA (Burns 2020). Estimated noise levels attributable to construction of the proposed Project and their comparison to the daytime City criterion are shown in Table 3-17, Construction Noise Levels at Noise-Sensitive Uses.

**TABLE 3-17
CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES**

Construction Phase	North – SFR along North Side of Cameron Ave (270 ft)		South – Water Tanks (177 ft)		East – SFR (96 ft)		West – SFR (34 ft)	
	Project Leq* (dBA)	Exceeds Daytime Leq Limit of 80 dBA?	Project Leq* (dBA)	Exceeds Daytime Leq Limit of 80 dBA?	Project Leq* (dBA)	Exceeds Daytime Leq Limit of 80 dBA?	Project Leq* (dBA)	Exceeds Daytime Leq Limit of 80 dBA?
Site Preparation	68	No	71	No	77	No	86	Yes
Grading/Excavation	68	No	72	No	77	No	86	Yes
Construction	68	No	67	No	77	No	86	Yes
Paving	63	No	62	No	72	No	81	Yes
Architectural Coatings	59	No	58	No	68	No	77	No
Leq dBA: average noise energy level in A-weighted decibels *: Based on calculated Leq at distances from center of Project site. Note: Noise levels from construction activities do not consider attenuation provided by intervening structures. Source (construction equipment noise levels): RCNM.								

Typical average noise levels (L_{eq}) from Project-related construction activities would be 58 to 86 dBA at the nearest off-site receptors. It should be noted that the construction noise calculations conservatively assume simultaneous operation of all equipment during each construction phase. In addition, construction would be temporary. For example, the site preparation phase, which would require the use of hand tools and landscaping equipment for brush clearance, would only last three weeks. Nevertheless, noise levels are anticipated to exceed the City's 80 dBA construction noise threshold at the residence abutting the site to the west during the site preparation, grading/excavation, building construction, and paving phases. Noise generated during the building construction, paving, and architectural coatings phases would be reduced by a minimum of 5 dBA with the installation of the retaining wall along the southern property line of the Project site. As a result, the Project contractors would be required to adhere to the regulatory compliance measures contained in the WCMC, specifically, Section 15-95(a). The Project Applicant would be required to obtain a permit pursuant to Section 15-95(b) of the WCMC. This permit would contain restrictions on when construction can occur, require noise attenuation on equipment exceeding specified noise levels, and other types of conditions to reduce noise levels more than 5 dBA above ambient noise levels, such as creating buffer zones and requiring the use of a single piece of equipment at a time, among other requirements.

Highest construction noise levels (L_{max}) represent the highest possible noise levels that would occur during Project construction and were calculated using the distance between the

closest noise sensitive use/receptor and the closest point of the Project site. Highest noise levels would occur only intermittently because construction equipment would move around the Project Site and would be located at the Project site's boundaries for short periods of time. As depicted in the modeling, highest noise levels from construction activities are anticipated to range from 70 to 101 dBA. With compliance with RR NOI-1, potential impacts are considered less than significant, and no mitigation is required.

Off-site Construction Vehicles Noise

A total of eight cubic yards of earth would be exported from the site during the Project's grading/excavation phase. A single haul truck would be able to transport the materials. The addition of this single haul truck to Cameron Avenue and Grand Avenue would not result in a significant increase in roadway noise levels.

A doubling of traffic volume on a roadway would result in a 3 dB increase in noise level. Large trucks generate substantially more noise than passenger vehicles. Noise level increases below 5 dB are readily perceptible in outdoor environments, and 5 dB is thus used as a threshold of significance here for off-site vehicular noise impacts. Project off-site vehicular noise impacts would be well below 5 dB and thus less than significant, and no mitigation is required.

Operational Noise

Permanent sources of noise associated with the Project involve vehicle trips to and from the Project site, property maintenance activities (landscaping), as well as mechanical sources of noise.

Noise Generated by Project Traffic

Operation of the proposed Project would generate traffic along roadways in the Project vicinity. The Project is anticipated to generate an additional 19 trips per day, with one trip occurring during the AM peak hour and two trips occurring during the PM peak hour (ITE 2021). Due to the small contribution of Project-related traffic along local roadways, traffic noise increases from the Project would not be perceptible or substantial. The impact on traffic noise levels would therefore be less than significant, and no mitigation is required.

Noise Generated by On-Site Sources

The primary noise sources generated by operation of the proposed Project would be heating, ventilation, and air conditioning (HVAC) equipment, landscape maintenance, trash collection, and the pool filter/pump. Noise generated by HVAC equipment and trash collection is not regulated by the WCMC. These sources of noise are common with land use development. Noise generated by landscaping activities is regulated by Section 15-97, which prohibits these activities between the hours of 8:00 PM and 8:00 AM within residential areas (RR NOI-2). These sources of noise are typical and not of sufficient magnitude and frequency of occurrence to be considered by the City to result in a significant noise impact. Impacts would be less than significant, and no mitigation is required. Requirements pertaining to Title 24 interior noise standards are included in RR NOI-3.

b) Generation of excessive groundborne vibration or groundborne noise levels?**Less Than Significant Impact.****Construction Vibration**

The nearest structures to the Project site are the water tanks and associated accessory structures located 50 feet from the Project's southern property line. The closest residential structures to the Project site are the single-family residence located 34 feet to the west and the single-family home located approximately 110 feet east of the Project site.

In terms of classifications in Table 3-18, the structures surrounding the Project site are considered "older residential structures" for purposes of this analysis. Therefore, the vibration building damage criterion of 0.30 PPV in/sec for a significant impact for continuous/frequent intermittent sources is applied.

Table 3-18 summarizes typical construction equipment vibration levels at a distance of 25 feet from the equipment. These reference vibration levels were used to estimate vibration levels during Project construction activities for various vibration-inducing equipment.

**TABLE 3-15
CONSTRUCTION EQUIPMENT REFERENCE VIBRATION LEVELS**

Equipment	PPV at 25 ft (in/sec)
Hoe Ram	0.089
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003
PPV: peak particle velocity; ft: feet; in/sec: inches per second. Source: Caltrans 2020; Federal Transit Administration 2018.	

The analysis of Project construction vibration was conducted for equipment that was identified by the Project Applicant. During the Project construction, conventional construction equipment would be used, with no pile driving or blasting equipment required. Drill rigs would be used to install the piles that would be used for the retaining walls and building foundation. Drill rigs do not generate the levels of vibration generated by pile drivers. For this analysis, caisson drilling was selected to quantify vibration levels generated during the installation of the piles and retaining walls. Furthermore, according to the Project Applicant, no vibratory rollers would be required for the paving phase.

Table 3-19, Estimated Project Construction Vibration Levels at Nearby Buildings, shows the estimated PPV from Project construction relative to the applicable building damage criterion level. The assessment of vibration induced damage was performed by assuming that equipment would be operating at the property lines closest to the nearest buildings. For

analyses of construction vibration induced damage, Project-generated vibration is measured from the source to the closest structure, unlike analyses of noise impacts, which are conducted at the property lines of affected properties. As shown in Table 3-19, vibration generated by the construction of the Project would not result in significant impacts related to vibration induced building damage, and no mitigation is required.

TABLE 3-16
ESTIMATED PROJECT CONSTRUCTION VIBRATION LEVELS AT NEARBY BUILDINGS

Equipment	Vibration Levels (PPV, in/sec)			
	Residential Uses to the North of the Project Site	Infrastructure (water tanks) to the South of the Project Site	Residential Uses to the East of the Project Site	Residential Uses to the West of the Project Site
	(PPV @ 150 ft)	(PPV @ 50 ft)	(PPV @ 110 ft)	(PPV @ 25 ft)
Caisson Drilling	0.006	0.031	0.010	0.028
Loaded Trucks	0.005	0.027	0.008	0.024
Jackhammer	0.002	0.012	0.004	0.011
Small Bulldozer	0.000	0.001	0.000	0.001
Building Damage Criteria	0.3	0.3	0.3	0.3
Exceeds Building Damage Criteria?	No	No	No	No
PPV: peak particle velocity; in/sec: inches per second; ft: feet				
Note: Calculations can be found in Appendix G.				
Source: FTA 2018				

Operational Vibration

The Project consists of a single-family development with an ADU. The Project would not contain any mechanical equipment or industrial activities that could result in the generation of vibration. In addition, the Project's fleet mix would mostly consist of light duty automobiles, further reducing the likelihood of generating groundborne vibration. Therefore, the proposed Project would cause no impacts related to operational vibration.

Project construction and operational vibration impacts would be less than significant, and no mitigation is required.

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

No Impact. The nearest public airports are the San Gabriel Valley Airport (formerly El Monte Airport), located 9 miles northwest of the Project site, and the Brackett Field Airport, located 5 miles northeast of the Project site. The Project site is also located well outside the existing and projected 65 dBA CNEL noise contours for the aforementioned airports, which would occur within 2 miles of an airport. Aircraft overflights do not significantly contribute to the

noise environment at the Project site, and the Project would not expose future Project residents to excessive aircraft noise levels. In addition, the Project site is not located within the vicinity of a private airstrip. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels from either airport or airstrip-related activities, and no mitigation is required.

Regulatory Requirements

- RR NOI-1** Project contractor must obtain a City permit for construction through demonstration of a plan of compliance with Section 15-95(a) of the WCMC.
- RR NOI-2** Per the City of West Covina Municipal Code, Section 15-95, Construction of Building Projects, construction activities are prohibited to occur between the hours of 8:00 PM of one day and 7:00 AM of the next day. Construction activities may not cause the noise level at the property line to exceed the ambient noise level by more than five (5) decibels unless a permit therefor has been duly obtained.
- RR NOI-3** The Project must be designed in accordance with the applicable Title 24 interior noise standards. Residential structures shall be designed to prevent the intrusion of exterior noise so that the interior noise attributable to exterior sources shall not exceed 45 A-weighted decibel scale (dBA) Community Noise Equivalent Level (CNEL) in any habitable room.

Mitigation Measures

Project implementation would not result in significant impacts related to Noise; therefore, no mitigation is required.

3.14 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

Would the Project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed Project consists of construction of a single-family residence, an ADU, and related residential amenities. The one-unit residential Project would generate residents but would not induce substantial unplanned population growth either directly (i.e., construction of multi-family dwellings or commercial development) or indirectly (i.e., extension or expansion of roads and related public infrastructure, or construction or expansion of public facilities such as parks or recreational facilities).

Additionally, the proposed Project is served by existing roads and utility infrastructure. No extension of roads or infrastructure is proposed by the Project such that would encourage development levels beyond what is already planned or indirectly induce growth. Therefore, the Project would not result in substantial unplanned population growth, directly or indirectly. No impacts would occur, and no mitigation is required.

- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The Project site is currently undeveloped. There is no existing housing and associated residents on the site that would be displaced by the development of the residential Project. The proposed Project would develop one two-story residential building with subterranean parking and one detached garage with a second-story accessory dwelling unit. Thus, no impact related to displacement of housing or construction of replacement housing would occur, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Population and Housing; therefore, no mitigation is required.

3.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Impact Analysis

Would the Project:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

Less Than Significant Impact. Fire protection services in the City, including the Project site, are provided by the West Covina Fire Department (WCFD), which maintains and operates five stations in the City. The 24-hour protection is provided daily by trained and qualified personnel on duty through the five fire stations serving the City. Each station is staffed with trained paramedics, and the five engine companies, the truck company, and the three ambulances are staffed by California-licensed paramedics and certified Emergency Medical Technicians (City of West Covina 2024b). Fire equipment is distributed throughout the City through the five fire stations. Fire Station 2, located at 2441 E. Cortez Street, is the closest station and would provide fire response to the Project site.

Given the size and nature of the proposed Project, it would not have the potential to result in the need for new firefighters and other personnel, nor would it require the construction of new or the alteration of existing fire protection facilities to maintain an adequate level of fire protection service in the City. The proposed Project would be required to comply with all applicable codes, ordinances, and regulations (including the WCMC) regarding fire prevention and suppression measures, fire hydrants and sprinkler systems, emergency

access, and other fire safety requirements. Therefore, the Project's potential impacts on public services pertaining to fire protection would be less than significant, and no mitigation is required.

ii) Police protection?

Less Than Significant Impact. The West Covina Police Department (WCPD) provides law enforcement services to the City of West Covina. The WCPD provides a full range of police services within two Divisions, the Patrol Division and the Investigative & Support Services Division (ISSD). The WCPD headquarters is in the West Covina City Hall at 1444 West Garvey Avenue. The City is organized into four service areas, Service Area 1 (North), Service Area 2 (East), Service Area 3, (Central), and Service Area 4 (South). Each Service Area is assigned a Lieutenant, so that non-emergency public concerns are quickly addressed (City of West Covina 2016b). The Project site is located within the WCPD Service Area 2, (East) (WCPD 2024).

Due to the negligible population generated from the Project, it would not result in a significant increased demand for police protection services and is not anticipated to increase WCPD response times to the Project site or surrounding area. Therefore, impacts associated with the provision of police protection services to the proposed Project would be less than significant, and no mitigation is required.

iii) Schools?

Less Than Significant Impact. The Project site is served by the Covina Valley Unified School District (CVUSD). The proposed Project involves the development of a single-family residential unit and an ADU. The Project would not generate a significant population and increased demand on schools in the City. Therefore, No impacts would occur, and no mitigation is required.

Parks?

Less Than Significant Impact. The proposed single-family residence and associated ADU would not generate a significant population and increased demand for and use of existing parks and recreational facilities. Given the minimal population generated by the Project no impacts would occur, and no mitigation is required.

vi) Other public facilities?

No Impact. The West Covina Library provides library services in the City of West Covina and is located at 1601 West Covina Parkway, approximately 4.2 miles northwest of the Project site. The Project involves the construction of a single-family residence and an ADU, which would not significantly affect or increase the demand for other public facilities, including libraries, in the City. Therefore, no impacts would, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Public Services; therefore, no mitigation is required.

3.16 RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Impact Analysis

Would the Project:

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The City's Community Services Division provides for the protection and enhancement of City parks, recreation facilities, and community services.

The closest park to the Project site is the 14.3-acre Heritage Park located at 3510 Cameron Avenue, approximately 400-feet west of the proposed site. The proposed two-story single-family residential building and associated ADU would not result in a significant population and increased demand for parks and recreational facilities. Therefore, the Project would not have the potential to significantly increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur. As such, no impacts would occur, and no mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. As described above, the Project would consist of the development of a single-family residence and associated ADU and would not involve the construction or expansion of recreational facilities. Therefore, no impacts would occur, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Recreation; therefore, no mitigation is required.

3.17 TRANSPORTATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Impact Analysis

Would the Project:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant Impact.

Short-Term Construction-Related Traffic

Construction traffic is not expected to create any significant impact due to the size of the proposed Project. It is anticipated that construction traffic (particularly heavy trucks) would access the site via E Cameron Avenue

To facilitate the movement of construction traffic and to minimize potential disruptions, traffic control measures would be implemented during construction, in accordance with the City requirements. (RR HAZ-4). With compliance with City requirements, the Project would not conflict with applicable plans, ordinance, or policy, and Project's impact would be less than significant, and no mitigation is required.

Project Traffic Operations and VMT

The City of West Covina adopted the use of Vehicle Miles Traveled (VMT) analysis methodology for evaluating potential traffic impacts for development projects. The City has also elected to continue to use Level of Service (LOS) analyses for planning purposes.

The Project would develop a single-family residence, an ADU, and associated improvements. Trips associated with the Project would be limited to the number of residents and their occasional guests. As such, impacts associated with VMT and traffic generation would be less than significant. The limited number of vehicle trips generated by the proposed Project would not cause significant impacts at roadways and intersections near the site and in the surrounding area. Therefore, the Project would not conflict with applicable policies, plans, ordinance, or programs related to the circulation systems, nor would it affect the performance of the surrounding intersections. Impacts would be less than significant, and no mitigation is required.

Sidewalks are present on East Cameron Avenue, which would be retained by the Project and would continue to accommodate pedestrians and bicyclists. The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Impacts would be less than significant, and no mitigation is required.

b) Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. State CEQA Guidelines Section 15064.3, subdivision (b) provides the criteria for analyzing transportation impacts, and a project's effect on automobile delay shall not constitute a significant environmental impact. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. Vehicle miles traveled (VMT) refers to the amount and distance of automobile travel attributable to a project. According to the State of California's *Technical Advisory on Evaluating Transportation Impacts in CEQA*, "certain projects (including residential, retail, and office projects, as well as projects that are a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor would have a less than significant impact on VMT" (OPR 2018). The City of West Covina adopted the use of Vehicle Miles Traveled (VMT) analysis methodology for evaluating potential traffic impacts for development projects. In light of the Project minimal increase in trips, less than significant impacts would result, and no mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

Less Than Significant Impact. Construction of the Project would require the transport of construction equipment and building materials to and from the site, as well as the hauling of demolition and construction debris from the site. Large trucks used for these activities would have to use designated truck routes in the City, in compliance with Chapter 22, Division 5, Truck Routes, of the Municipal Code (RR TRA-1). Roadway hazards from these trucks and equipment would be less than significant.

The Project would have two access points onto East Cameron Avenue. The on-site driveway, drive aisles, and motor courts would comply with the City roadway standards for adequate sight distance (RR TRA-2) and turning radius.

Therefore, with compliance with City requirements, impacts from hazards due to a geometric design feature would be less than significant, and no mitigation is required. Thus, it would not interfere with access, circulation, or activities at the surrounding land uses. Additionally, the Project would not introduce an incompatible use that would create a traffic hazard to surrounding residences.

d) Result in inadequate emergency access?

Less Than Significant Impact. During demolition and construction, construction equipment would be staged on the Project site and would not block the roadways surrounding the Project site. Construction on and obstruction of public rights-of-way associated with utility connections to existing utility infrastructure would be made in accordance with applicable City requirements, including City Standard Plans, Section 19-302, Standard Specifications for Public Works Construction (Greenbook), of the WCMC (Greenbook) (see RR HAZ-1). No full road closures would occur during the construction phase of the Project. Accordingly, temporary construction activities would not impede the use of surrounding roadways for emergency evacuation or access for emergency response vehicles. Adjacent streets would also be returned to their original conditions after construction activities. Impacts would be temporary and less than significant, and no mitigation is required.

Per the City requirements and consistent with the discussion in Section 4.15, Public Services (RR PS-1) the Project would provide adequate access for emergency vehicles. In addition, the internal circulation, drive aisles, and motor courts would comply with City roadway standards for adequate sight distance. As designed, the proposed Project would provide adequate emergency access. Impacts would be less than significant, and no mitigation is required.

Regulatory Requirements

RR TRA-1 All trucks used during demolition and construction and during long-term occupancy of the Project shall use designated truck routes, in compliance with Chapter 22, Division 5, Truck Routes, of the West Covina Municipal Code.

RR TRA-2 The Project shall be designed and constructed to provide adequate sight distance for drivers at all entrances and exits (driveways), drive aisles, and roadways, per West Covina Municipal Code Section 22.8, Obstruction to Visibility at Intersections or Driveways.

Mitigation Measures

Project implementation would not result in significant impacts related to Transportation; therefore, no mitigation measures are required.

3.18 TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☐	☒	☐
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

Impact Analysis

Would the Project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

Less Than Significant Impact. The Project would not involve development of greater density, intensity, or height than permitted under State Law, the General Plan, or the Municipal Code and would not allow the Project on a site where such development is prohibited under State Law or the General Plan. Thus, if the Project encounters cultural or tribal cultural resources during earth moving activities, all work will stop, and the Project Applicant, as part of the Project, will invite a Native American Representative to evaluate the finds. If the find is considered a significant tribal cultural resource, the Applicant will retain a Native American Monitor to monitor during large areas of earth-moving activities, as needed. The potential impacts would be less than significant with this feature; therefore, no mitigation is required.

- 2. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.***

Less Than Significant Impact. The proposed Project is required to comply with Section 7050.5 of the California Health and Safety Code in the unlikely event that human remains are encountered during construction. If human remains of Native American origin are discovered during construction activities, the proposed Project would be required to comply with State laws, under the jurisdiction of the Native American Heritage Commission (Public Resources Code Section 5097), relating to handling of Native American burials (RR TCR-1).

If archaeological resources are discovered during excavation or grading activities, work shall cease in the area of the find until a qualified archaeologist has evaluated the find in accordance with federal, State, and local guidelines, including those set forth in the Public Resources Code Section 21083.2. With compliance with these requirements, potential impacts would be less than significant, and no mitigation is required.

Regulatory Requirements

RR TCR-1 If human remains are encountered during any Project-related ground-disturbing activities, Section 7050.5 of the *California Health and Safety Code* states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition of the materials pursuant to Section 5097.98 of the *California Public Resources Code*. The provisions of Section 15064.5 of the California Environmental Quality Act Guidelines shall also be followed. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner shall notify the Native American Heritage Commission (NAHC). The NAHC will determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The descendent must complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native

American burials. These requirements shall be included as notes on the contractor specification and verified by the Community Development Department, prior to issuance of grading permits. This measure shall be implemented to the satisfaction of the City in consultation with the County Coroner.

Mitigation Measures

Project implementation would not result in significant impacts related to Tribal Cultural Resources; therefore, no mitigation measures are required.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Analysis

Would the Project:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

Less Than Significant Impact.***Water***

Water service for the Project would be provided by Valencia Heights Water Company (VHWC), which serves a population of approximately 8,000 customers through 1,700 services connections in the cities of West Covina and Covina and unincorporated areas of Los Angeles County (VHWC 2022). The VHWC sources water supply through the Covina Irrigating Company and the San Gabriel Basin, as well as purchased import water from Three Valleys Municipal Water District (TVMWD) (VHWC 2022). The VHWC Water Supply Shortage Contingency Plan (Plan), adopted May 19, 2022, identified the long-term average monthly use at 155 acre-feet. As discussed in the Plan, the VHWC has not yet experienced conditions such that supply was insufficient to meet demand, and no water shortage is currently forecasted.

Water service to the Project would also be provided in compliance with Chapter 23, Article III, Water of the WCMC, which sets regulations for service connections, water rates, and other water system provisions (see RR UTL-1).

Prior to the issuance of the building permit, the applicant would be required to verify that the City's water system can accommodate the proposed Project's fire flows and potable water demand. The estimated water demand of the Project is not expected to exceed available supplies or the available capacity within the distribution infrastructure that would serve the Project site. Based on the analysis above, the Project would not require or result in the relocation or construction of new or expanded water facilities, which would cause significant environmental effects. The Project would comply with RR UTL-1. Impacts would be less than significant, and no mitigation required.

Wastewater Treatment/Storm Drainage

The City of West Covina Public Services Department (Maintenance Division) maintains the City's sewer system. Wastewater from the City's system is treated by the Los Angeles County Sanitation District (LACSD). West Covina's wastewater is treated and disposed of at the LACSD's San Jose Creek Water Reclamation Plant (SJCWRP) and/or the Whittier Narrows Reclamation Plant (WNRP). West Covina is spread across three LACSD sanitation districts: 15, 21, and 22. The SJCWRP has a maximum permitted capacity of 100 million gallons of wastewater per day (mgd) and serves a large residential population of approximately one million people. The SJCWRP treats an average flow of 65.7 mgd (City of West Covina 2016b). The WNRP has a maximum permitted capacity of 15 mgd and serves a population of approximately 150,000 people. Currently, the WNRP treats an average flow of 7 mgd (City of West Covina 2016b). Within each sanitation district there are differing sewer connection fees. Connection fees are paid for by the connection of new service, expansion of service, change of use category, demolition or rebuilding of a facility, and application for an industrial wastewater permit (City of West Covina 2016b).

As stated above, SJCWRP has a maximum permitted capacity of 100 mgd and treats an average flow of 65.7 mgd. Given the existing capacities at SJCWRP and WNRP, both facilities would be able to serve the Project.

The storm water runoff from the Project site would not exceed the capacity of the existing storm drain system, and no infrastructure improvements would be required beyond the installation of on-site storm drain facilities. The construction of the on-site water quality BMPs within the Project site has the potential for temporary construction-related impacts. Since utility installations are within the construction impact limits identified for the proposed Project, the potential impacts associated with the construction of storm drain lines have been addressed in the respective sections of this Initial Study. Impacts would be less than significant, and no mitigation is required.

Electricity

Southern California Edison (SCE) currently provides electricity to the City of West Covina, including the Project Site (SCE 2024). Electrical service to the Project site would be provided in accordance with SCE's policies and extension rules on file with the California Public Utilities Commission (CPUC). Therefore, a significant impact related to the need for new systems or supplies, or substantial alterations related to electricity would not occur. Additionally, the Project Applicant will coordinate with SCE to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and no mitigation is required.

Natural Gas

The Southern California Gas Company (SCGC) currently provides natural gas service to the City of West Covina, including the Project site (SCGC 2024). The service would be provided in accordance with SCGC's policies and extension rules on file with the CPUC. Therefore, a significant impact related to the need for new systems or supplies, or substantial alterations related to natural gas would not occur. Additionally, the Project Applicant would coordinate with SCGC to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and no mitigation is required.

Telecommunications

Verizon provides telecommunications service to the area, including the Project site. The service would be provided in accordance with Verizon's policies and extension rules on file with the CPUC. Therefore, a significant impact related to the need for new systems or supplies, or substantial alterations related to telecommunications would not occur. Additionally, the Project Applicant would coordinate with Verizon to ensure avoidance of any notable service disruptions during the extension of, relocation of, upgrade of, or connection to services. Impacts are considered less than significant, and mitigation is not required.

The Project would not require the construction or expansion of water or wastewater infrastructure and treatment facilities, storm water drainage, electric power, natural gas, or telecommunications facilities. Impacts would be less than significant, and no mitigation is required.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple years?

Less Than Significant Impact. As stated in response to Threshold 4.19a, above, water service for the Project would be provided by the Valencia Heights Water Company. The Plan stated that VHWC has not yet experienced conditions such that supply was insufficient to meet demand, nor is a water shortage forecasted.

Water service to the Project would be provided in compliance Chapter 23, Article III, Water of the West Covina Municipal Code, which sets regulations for service connections, water rates, and other water system provisions (see RR UTL-1).

The Project would comply with Sections 4.303 and 4.304 of the CALGreen Code (as adopted by the City), which require indoor and outdoor water conservation measures such as low flush toilets, aerators on sinks and showerheads, other water-efficient appliances, and water-efficient automatic irrigation system controllers. Compliance with these regulations and programs is provided as RR UTL-3.

The increase in water demand generated by the proposed Project would be minimal; would be served by the VHWC with minor impacts on current water supplies; and is within the projected growth and increased water demand within VHWC's service area. With compliance with the City's water conservation measures, the proposed Project would not significantly impact VHWC's domestic water supply. Impacts would be less than significant, and no mitigation is required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project proposes the construction of a single-family residence, an ADU, and associated improvements. As such, the wastewater generated at the Project site would be negligible. As stated above, SJCWRP has a maximum permitted capacity of 100 mgd and treats an average flow of 65.7 mgd. The remaining available capacity is 34.3 mgd. WNRP has a capacity of 15 mgd and treats an average flow of 7 mgd, which leaves an available capacity of 8 mgd. The Project would not exceed the capacities of the wastewater treatment facilities. Impacts would be less than significant, and no mitigation is required.

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

Less Than Significant Impact. The City of West Covina contracts with Athens Services to provide trash, recycling, and special pickup services throughout the City. Athens Services provides trash and recycling collection service to residences, as well as all commercial, governmental, and industrial facilities within West Covina (City of West Covina 2016a). Waste collected by Athens Services within the City is taken to a Materials Recovery Facility (MRF) in the City of Industry, which accepts trash as well as commingled materials such as glass, plastic, cardboard, etc. that is sorted and separate at the facility. The City of Industry MRF can process 5,000 tons of mixed material each day (City of West Covina 2016a). Solid waste that is not diverted is disposed of at the Victorville Sanitary Landfill, a Class III (i.e., municipal waste) landfill located in the City of Victorville. Victorville Sanitary Landfill is owned and operated by the County of San Bernardino Solid Waste Management Division. The landfill has a permitted daily throughput of 3,000 tons/day, a max permitted capacity of 83,200,000 cubic yards, and an estimated remaining capacity of 81,510,000 (CalRecycle 2020). The City's solid waste disposal activities are required to be in compliance with the California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939). AB 939 requires jurisdictions to meet the statewide goal to divert 25 percent and 50 percent of solid waste generated by year 1995 and 2000.

Project implementation would result in the development of a single-family residential unit, an ADU, and associated improvements. The solid waste generated at the Project site would be negligible. The Victorville Sanitary Landfill with remaining capacity of 81,510,000 and an anticipated closure date of October 1, 2047 would accommodate the long-term operational and short-term disposal of construction wastes from the Project.

As discussed in Section 4.9, Hazards and Hazardous Materials, of this Initial Study, hazardous wastes generated during construction activities would be disposed of in accordance with existing regulations. Similarly, hazardous material used during construction and occupancy of the proposed Project, would be conducted in compliance with applicable regulations.

Thus, the Project would result in less than significant impact pertaining to disposal of solid waste during construction and post construction, and no mitigation is required.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Utilities and Service Systems; therefore, no mitigation is required.

3.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Impact Analysis

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?***
- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

Less Than Significant Impact. The proposed Project is within a VHFHSZ, as defined by the California Department of Forestry and Fire Prevention (CalFire). As discussed in Section 4.9, Hazards and Hazardous Materials, the proposed Project is located directly south of East Cameron Avenue, which is a designated evacuation route in the City of West Covina. Temporary lane closures on the neighborhood access road and East Cameron Avenue may occur during Project construction. Therefore, the Project has the potential to interfere with an adopted emergency evacuation plan during short-term construction activities. However,

despite potential lane closures during construction, with compliance with the NHMP, impacts would be less than significant, and no mitigation is required.

Additionally, while the Project introduces a use on an undeveloped site, it would be consistent with the surrounding uses and would therefore not introduce new significant risks related to fire hazards compared to existing conditions. Further, as discussed in Section 3.9, Hazards and Hazardous Materials, the Project would comply with all applicable State and local fire regulations.

Regulatory Requirements

None required.

Mitigation Measures

Project implementation would not result in significant impacts related to Wildfire; therefore, no mitigation measures are required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ('Cumulatively considerable' means that the incremental effects of a 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)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact Analysis:

Would the Project:

- a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or***

animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact. As indicated in Section 3.4, Biological Resources, of this Initial Study, given the existing condition of the site, migratory birds may nest on the vegetation on-site. However, as a PDF, a pre-construction survey for nesting birds will be conducted within three days of the start of any vegetation removal or ground disturbing activities. The potential impacts would be less than significant with the PDF, and no mitigation is required.

There are no historic resources on the Project site that would be impacted by the proposed Project. Additionally, the PDF proposed in Section 3.5, Cultural Resources, would prevent impacts on buried archaeological resources, if uncovered during grading and excavation activities. Further, the PDF in Section 3.7, Geology and Soils for Paleontological Resources, would help avoid impacts on the said resources. Lastly, similar to other resources, the potential impact to tribal cultural resources would be less than significant with the proposed PDF in Section 3.18, Tribal Cultural Resources.

Therefore, the Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; or eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant with the proposed PDFs, as discussed above.

b) Have impacts that are individually limited, but cumulatively considerable? ('Cumulatively considerable' means that the incremental effects of a 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)?

Less Than Significant Impact. As identified in the preceding analyses, all Project-level impacts have been determined to be less than significant with or without compliance with regulatory requirements or mitigated to a level considered less than significant with incorporation of mitigation measures. While the Project would contribute to potential environmental effects related to biological resources, cultural resources, geology and soils (paleontological resources), and tribal cultural resources these impacts would not be cumulatively considerable, since mitigation measures would be implemented to avoid or reduce potential Project-specific impacts associated with these environmental issues. As discussed in Section 4.3, Air Quality, and Section 4.8, Greenhouse Gas Emissions, of this IS/MND, the Project's air quality and GHG emissions impacts would be less than significant, and the impacts would not be considered cumulatively considerable.

No new development or redevelopment is planned adjacent to the site that would occur concurrently with Project construction. Development projects would be subject to environmental review by the City, pursuant to CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines, to determine if they would lead to cumulative environmental effects as part of the appropriate CEQA analysis for each project. Since the proposed Project

would not have significant impacts after mitigation, the impacts of the Project are not expected to result in cumulatively considerable impacts when added to the impacts of other projects planned or proposed in the vicinity of the site. Cumulative impacts would be less than significant, and no mitigation is required.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. Based on the environmental analyses above, with compliance with applicable regulatory requirements and/or the implementation of project design features, the Project would have less than significant impacts on human beings, either directly or indirectly, as it relates to all environmental topics, as discussed in Sections 3.1 through 3.20, above.

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Appendix A

Air Quality and Greenhouse Gas Emissions Modeling Data

Rise Residence v2 Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.3. Construction Emissions by Year, Mitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
- 3. Construction Emissions Details
 - 3.1. Site Preparation (2025) - Unmitigated
 - 3.2. Site Preparation (2025) - Mitigated
 - 3.3. Grading (2025) - Unmitigated

3.4. Grading (2025) - Mitigated

3.5. Building Construction (2025) - Unmitigated

3.6. Building Construction (2025) - Mitigated

3.7. Building Construction (2026) - Unmitigated

3.8. Building Construction (2026) - Mitigated

3.9. Paving (2026) - Unmitigated

3.10. Paving (2026) - Mitigated

3.11. Architectural Coating (2026) - Unmitigated

3.12. Architectural Coating (2026) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Rise Residence v2
Construction Start Date	1/2/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	22.4
Location	3550 E Cameron Ave, West Covina, CA 91791, USA
County	Los Angeles-South Coast
City	West Covina
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5037
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.28

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	2.00	Dwelling Unit	0.98	19,161	23,426	—	6.00	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Energy	E-10-B	Establish Onsite Renewable Energy Systems: Solar Power
Water	W-4	Require Low-Flow Water Fixtures

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.85	4.13	6.31	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,136
Mit.	2.85	4.13	6.31	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,136
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46	4.13	6.17	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,135
Mit.	0.46	4.13	6.17	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,135
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.51	2.87	3.08	0.01	0.11	0.04	0.15	0.10	0.01	0.11	—	773
Mit.	0.51	2.87	3.08	0.01	0.11	0.04	0.15	0.10	0.01	0.11	—	773
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.52	0.56	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	128

Mit.	0.09	0.52	0.56	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	128
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	4.13	6.31	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,136
2026	2.85	3.89	3.51	0.01	0.16	0.07	0.17	0.15	0.02	0.15	—	1,135
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	4.13	6.17	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,135
2026	0.42	3.89	3.50	0.01	0.16	0.01	0.17	0.15	< 0.005	0.15	—	1,135
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.31	2.87	3.08	0.01	0.11	0.04	0.15	0.10	0.01	0.11	—	773
2026	0.51	1.57	1.48	< 0.005	0.06	0.01	0.07	0.06	< 0.005	0.06	—	429
Annual	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.06	0.52	0.56	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	128
2026	0.09	0.29	0.27	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	71.0

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	4.13	6.31	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,136

2026	2.85	3.89	3.51	0.01	0.16	0.07	0.17	0.15	0.02	0.15	—	1,135
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.46	4.13	6.17	0.01	0.17	0.16	0.29	0.15	0.04	0.16	—	1,135
2026	0.42	3.89	3.50	0.01	0.16	0.01	0.17	0.15	< 0.005	0.15	—	1,135
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.31	2.87	3.08	0.01	0.11	0.04	0.15	0.10	0.01	0.11	—	773
2026	0.51	1.57	1.48	< 0.005	0.06	0.01	0.07	0.06	< 0.005	0.06	—	429
Annual	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.06	0.52	0.56	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	128
2026	0.09	0.29	0.27	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	71.0

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.11	0.12	2.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	1.00	218
Mit.	1.11	0.12	2.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	0.99	198
% Reduced	—	—	—	—	—	—	—	—	—	—	1%	9%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.10	0.13	2.04	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	1.00	212
Mit.	1.10	0.13	2.04	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	0.99	192
% Reduced	—	—	—	—	—	—	—	—	—	—	1%	10%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.11	0.13	2.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	1.00	212

Mit.	1.11	0.13	2.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	0.99	191
% Reduced	—	—	—	—	—	—	—	—	—	—	1%	10%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.02	0.39	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.17	35.0
Mit.	0.20	0.02	0.39	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.16	31.7
% Reduced	—	—	—	—	—	—	—	—	—	—	1%	10%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125
Area	0.45	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.8
Water	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14
Stationary	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	1.11	0.12	2.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	1.00	218
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Area	0.44	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.8
Water	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14

Stationary	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	1.10	0.13	2.04	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	1.00	212
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.48	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	118
Area	0.45	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.8
Water	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14
Stationary	0.60	0.06	1.57	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.5
Total	1.11	0.13	2.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	1.00	212
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6
Area	0.08	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.42
Water	—	—	—	—	—	—	—	—	—	—	0.02	0.74
Waste	—	—	—	—	—	—	—	—	—	—	0.14	0.50
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.02
Stationary	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71
Total	0.20	0.02	0.39	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.17	35.0

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125

Area	0.45	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Water	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14
Stationary	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	1.11	0.12	2.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	0.99	198
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Area	0.44	—	—	—	—	—	—	—	—	—	—	—
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Water	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14
Stationary	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	1.10	0.13	2.04	< 0.005	0.01	0.11	0.12	0.01	0.03	0.03	0.99	192
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.48	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	118
Area	0.45	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.21
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Water	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Waste	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.14
Stationary	0.60	0.06	1.57	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.5
Total	1.11	0.13	2.13	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	0.99	191
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6

Area	0.08	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03
Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.08
Water	—	—	—	—	—	—	—	—	—	—	0.02	0.72
Waste	—	—	—	—	—	—	—	—	—	—	0.14	0.50
Refrig.	—	—	—	—	—	—	—	—	—	—	—	0.02
Stationary	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71
Total	0.20	0.02	0.39	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.16	31.7

3. Construction Emissions Details

3.1. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.2. Site Preparation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.75
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.3. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.87	5.44	0.01	0.12	—	0.12	0.11	—	0.11	—	829
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.87	5.44	0.01	0.12	—	0.12	0.11	—	0.11	—	829
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	1.16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	177
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.3
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.87	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.87
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.86
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40

Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07

3.4. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.87	5.44	0.01	0.12	—	0.12	0.11	—	0.11	—	829
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	3.87	5.44	0.01	0.12	—	0.12	0.11	—	0.11	—	829
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	1.16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	177
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.3
Dust From Material Movement	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.87	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	175
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.87
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.06	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.86
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.96
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.07

3.5. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	4.12	3.51	0.01	0.17	—	0.17	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	4.12	3.51	0.01	0.17	—	0.17	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.02	1.72	0.01	0.08	—	0.08	0.08	—	0.08	—	549
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.55
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.6. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	4.12	3.51	0.01	0.17	—	0.17	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	4.12	3.51	0.01	0.17	—	0.17	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	2.02	1.72	0.01	0.08	—	0.08	0.08	—	0.08	—	549
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.55
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.48
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.88	3.46	0.01	0.16	—	0.16	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.88	3.46	0.01	0.16	—	0.16	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.34	1.19	< 0.005	0.05	—	0.05	0.05	—	0.05	—	385
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.90
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.97
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.36
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.96
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.8. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.88	3.46	0.01	0.16	—	0.16	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	3.88	3.46	0.01	0.16	—	0.16	0.15	—	0.15	—	1,118
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.34	1.19	< 0.005	0.05	—	0.05	0.05	—	0.05	—	385
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.24	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.90
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.97
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.36
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.96
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.28
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.16	0.84	< 0.005	0.05	—	0.05	0.04	—	0.04	—	156
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.96
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.10. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.16	0.84	< 0.005	0.05	—	0.05	0.04	—	0.04	—	156
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.96
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.48
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.18	1.28	1.70	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201
Architectural Coatings	2.67	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8
Architectural Coatings	0.33	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.10
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

3.12. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.28	1.70	< 0.005	0.03	—	0.03	0.03	—	0.03	—	201
Architectural Coatings	2.67	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.16	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.8
Architectural Coatings	0.33	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.10
Architectural Coatings	0.06	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125
Total	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Total	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6
Total	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125
Total	0.06	0.04	0.51	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	125
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Total	0.06	0.05	0.47	< 0.005	< 0.005	0.11	0.11	< 0.005	0.03	0.03	—	120
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6
Total	0.01	0.01	0.09	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	19.6

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	20.2
Total	—	—	—	—	—	—	—	—	—	—	—	20.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	20.2
Total	—	—	—	—	—	—	—	—	—	—	—	20.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.34
Total	—	—	—	—	—	—	—	—	—	—	—	3.34

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	< 0.005
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	< 0.005
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	< 0.005

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.08
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.08

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
----------	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.08
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.08

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Total	0.45	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—
Total	0.44	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03
Total	0.08	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Total	0.45	< 0.005	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.41	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—

Total	0.44	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03
Total	0.08	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.03

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Total	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Total	—	—	—	—	—	—	—	—	—	—	0.14	4.47
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.02	0.74
Total	—	—	—	—	—	—	—	—	—	—	0.02	0.74

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Total	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Total	—	—	—	—	—	—	—	—	—	—	0.13	4.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.02	0.72
Total	—	—	—	—	—	—	—	—	—	—	0.02	0.72

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Total	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Total	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.14	0.50
Total	—	—	—	—	—	—	—	—	—	—	0.14	0.50

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Total	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Total	—	—	—	—	—	—	—	—	—	—	0.86	3.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	0.14	0.50
Total	—	—	—	—	—	—	—	—	—	—	0.14	0.50

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	0.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	0.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	0.02

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	0.14
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.14
Total	—	—	—	—	—	—	—	—	—	—	—	0.14
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71
Total	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Emergency Generator	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Total	0.60	0.06	1.56	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	40.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71
Total	0.11	0.01	0.29	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	6.71

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/2/2025	1/23/2025	6.00	19.0	—
Grading	Grading	1/24/2025	4/24/2025	6.00	78.0	—
Building Construction	Building Construction	4/25/2025	6/25/2026	5.00	305	—
Paving	Paving	6/26/2026	7/26/2026	5.00	21.0	—
Architectural Coating	Architectural Coating	7/27/2026	9/27/2026	5.00	45.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Other Construction Equipment	Electric	Average	1.00	9.00	82.0	0.42
Grading	Excavators	Diesel	Average	2.00	9.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	2.00	9.00	8.00	0.43
Grading	Bore/Drill Rigs	Diesel	Average	1.00	9.00	83.0	0.50
Building Construction	Cranes	Diesel	Average	1.00	9.00	367	0.29

Building Construction	Other Construction Equipment	Electric	Average	1.00	9.00	82.0	0.42
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	9.00	10.0	0.56
Paving	Pumps	Diesel	Average	1.00	9.00	11.0	0.74
Architectural Coating	Air Compressors	Diesel	Average	1.00	9.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Other Construction Equipment	Electric	Average	1.00	9.00	82.0	0.42
Grading	Excavators	Diesel	Average	2.00	9.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	2.00	9.00	8.00	0.43
Grading	Bore/Drill Rigs	Diesel	Average	1.00	9.00	83.0	0.50
Building Construction	Cranes	Diesel	Average	1.00	9.00	367	0.29
Building Construction	Other Construction Equipment	Electric	Average	1.00	9.00	82.0	0.42
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	9.00	10.0	0.56
Paving	Pumps	Diesel	Average	1.00	9.00	11.0	0.74
Architectural Coating	Air Compressors	Diesel	Average	1.00	9.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.03	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.72	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.21	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.14	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	2.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT

Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	12.5	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.03	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.72	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	0.21	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	5.00	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.14	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	38,801	12,934	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	0.50	0.00	—
Grading	—	8.21	1.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.02

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.02	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	462	532	0.03	< 0.005
2026	231	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	18.9	19.1	17.1	6,809	154	156	140	55,632

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	18.9	19.1	17.1	6,809	154	156	140	55,632

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
38801.025	12,934	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
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Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	13,790	532	0.0330	0.0040	76,671

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	0.29	532	0.0330	0.0040	76,671

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	74,548	401,549

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	67,637	401,549

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	1.59	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	1.59	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	CNG	1.00	1.36	500	50.0	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.3	annual days of extreme heat
Extreme Precipitation	6.05	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.41	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	74.1
AQ-PM	86.0
AQ-DPM	63.2
Drinking Water	96.0
Lead Risk Housing	54.1
Pesticides	0.00
Toxic Releases	74.7
Traffic	84.9
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	0.00

Haz Waste Facilities/Generators	51.7
Impaired Water Bodies	33.2
Solid Waste	0.00
Sensitive Population	—
Asthma	41.5
Cardio-vascular	49.2
Low Birth Weights	59.8
Socioeconomic Factor Indicators	—
Education	33.5
Housing	75.7
Linguistic	52.9
Poverty	44.1
Unemployment	47.0

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	70.85846272
Employed	65.05838573
Median HI	79.5072501
Education	—
Bachelor's or higher	73.37354036
High school enrollment	100
Preschool enrollment	46.33645579
Transportation	—
Auto Access	87.47593995
Active commuting	45.32272552

Social	—
2-parent households	25.47157706
Voting	52.53432568
Neighborhood	—
Alcohol availability	66.38008469
Park access	14.51302451
Retail density	48.51790068
Supermarket access	38.63723855
Tree canopy	47.11920955
Housing	—
Homeownership	78.3908636
Housing habitability	55.90914924
Low-inc homeowner severe housing cost burden	37.93147697
Low-inc renter severe housing cost burden	24.48351084
Uncrowded housing	58.11625818
Health Outcomes	—
Insured adults	63.35172591
Arthritis	55.6
Asthma ER Admissions	70.8
High Blood Pressure	34.2
Cancer (excluding skin)	32.7
Asthma	95.7
Coronary Heart Disease	51.0
Chronic Obstructive Pulmonary Disease	76.7
Diagnosed Diabetes	43.0
Life Expectancy at Birth	61.8
Cognitively Disabled	88.7
Physically Disabled	69.8

Heart Attack ER Admissions	72.1
Mental Health Not Good	83.6
Chronic Kidney Disease	55.3
Obesity	82.4
Pedestrian Injuries	19.6
Physical Health Not Good	67.2
Stroke	58.2
Health Risk Behaviors	—
Binge Drinking	82.5
Current Smoker	87.1
No Leisure Time for Physical Activity	60.8
Climate Change Exposures	—
Wildfire Risk	39.1
SLR Inundation Area	0.0
Children	59.5
Elderly	25.1
English Speaking	50.1
Foreign-born	80.5
Outdoor Workers	71.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	80.7
Traffic Density	85.1
Traffic Access	23.0
Other Indices	—
Hardship	34.3
Other Decision Support	—
2016 Voting	36.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	62.0
Healthy Places Index Score for Project Location (b)	65.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Size of Project site. Build floor area includes garage.
Construction: Construction Phases	Demolition phase was removed as the Project's implementation would not require any demolition.
Operations: Emergency Generators and Fire Pumps	Home generators are sold in gasoline or CNG configurations.
Construction: Off-Road Equipment	Based on data provided by the Applicant.
Operations: Hearths	No fireplaces or woodstoves would be provided.

Appendix B

Energy Data

Energy Use Summary

Construction Phase (gallons/construction period)	Gasoline	Diesel		Electricity (kWh/yr)
Construction Vehicles	0	4,087	2025	462
Worker Trips	1,124	3	2026	231
Vendor Trips	0	0	Total	693
Haul Trucks	0	0		
Total	1,124	4,090		

Operations Phase (gallons/year)	Gasoline	Diesel	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Single Family Housing	1,627	146	76,671	13,790
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
All Land Uses	1,627	146	76,671	13,790

Year	2035
------	------

	10811067.6	471108.1	899744.0	21521.8	334471.5	12537913.1
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Vehicle Trips

Diesel	HHDT	IDA	LD1	LD2	LHDT1	LHDT2	MCV	MDV	MW	MHDT	OBUS	CBUS	IBUS	Total
--------	------	-----	-----	-----	-------	-------	-----	-----	----	------	------	------	------	-------

Electricity	HHDT	IDA	IDT1	IDT2	IHDT1	IHDT2	MCV	MDV	MH	MHDT	ORUS	SBUS	IRBUS	Total
-------------	------	-----	------	------	-------	-------	-----	-----	----	------	------	------	-------	-------

Natural Gas	HHDT	LDA	LDT1	LDT2	LHDT1	LHDT2	MCY	MDV	MH	MHDT	OBUS	SBUS	UBUS	Total
-------------	------	-----	------	------	-------	-------	-----	-----	----	------	------	------	------	-------

Utilities

Land Use	NaturalGas Use kBTU/yr	Electricity Use kWh/yr
Single Family Housing	76671	13790
	0	
	0	
	0	
	0	
	0	
	0	
	-	-
Total	76,671	13,790

Operations Offroad Equipment

	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type	Fuel consumption (gal/hr)	
2024Portat	1	1.36	365	50	0.73	Diesel	1.32	478

1.321087
642.2362
0.099218

Offroad Construction Equipment Energy Use

[illegible]

Year	2024
------	------

Daily Trips							Gasoline Consumption			Diesel Consumption		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker	Vendor	Haul	Worker	Vendor	Haul
Site Preparation	3	0	0	18.5	10.2	20						
Grading	13	0	0	18.5	10.2	20						
Building Construction	1	0	0	18.5	10.2	20						
Paving	5	0	0	18.5	10.2	20						
Architectural Coating	0	0	0	18.5	10.2	20						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
	0	0	0	0	0	0						
Total Trips												
Site Preparation		0	0	18.5	10.2	20	43	0	0	0	0	0
Grading	1014	0	0	18.5	10.2	20	769	0	0	2	0	0
Building Construction	305	0	0	18.5	10.2	20	231	0	0	1	0	0
Paving	105	0	0	18.5	10.2	20	80	0	0	0	0	0
Architectural Coating	0	0	0	18.5	10.2	20	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Total							1,124	0	0	3	0	0

Appendix C

Noise Calculations

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Architectural Coatings - Highest

---- Receptor #1 ----

Baselines (dBA)			
Description Land Use	Daytime	Evening	Night
SFR along r Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	80	0

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	*Lmax	Leq	Day	Leq	Evening	Leq	Night	Leq	Day	Leq	Evening	Leq	Night	Leq	
			Lmax		Lmax		Lmax		Lmax		Lmax		Lmax		Lmax
Compressor (air)	73.6	69.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	73.6	69.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)			
Description Land Use	Daytime	Evening	Night
Water Tank Industrial	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	30	5

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	*Lmax	Leq	Day	Leq	Evening	Leq	Night	Leq	Day	Leq	Evening	Leq	Night	Leq	
			Lmax		Lmax		Lmax		Lmax		Lmax		Lmax		Lmax
Compressor (air)	77.1	73.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	77.1	73.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)			
Description Land Use	Daytime	Evening	Night
SFR to the e Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	20	0

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	*Lmax	Leq	Day	Leq	Evening	Leq	Night	Leq	Day	Leq	Evening	Leq	Night	Leq	
			Lmax		Lmax		Lmax		Lmax		Lmax		Lmax		
Compressor (air)	85.6	81.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	85.6	81.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)			
Description Land Use	Daytime	Evening	Night
SFR to the v Residential	55	55	55

Description	Impact Device	Usage(%)	Equipment Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	6	0

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	*Lmax	Leq	Day	Evening			Night		Day	Leq	Evening	Leq	Night	Leq	
			Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax		Leq		Lmax		Leq
Compressor (air)	96.1	92.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	96.1	92.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Architectural Coatings - Typical)

---- Receptor #1 ----

Baselines (dBA)			
Description	Land Use	Daytime	Evening Night
SFR along r	Residential	55	55 55

Equipment						
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40			77.7	270 0

Results

Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
Equipment	*Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq
			Lmax	Lmax										
Compressor (air)	63	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)			
Description	Land Use	Daytime	Evening Night
Water Tank	Industrial	55	55 55

Equipment						
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40			77.7	177 5

Results

Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
Equipment	*Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq
			Lmax	Lmax										
Compressor (air)	61.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	61.7	57.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)			
Description	Land Use	Daytime	Evening Night
SFR to the e	Residential	55	55 55

Equipment						
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40			77.7	96 0

Results

Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
Equipment	*Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq
			Lmax	Lmax										
Compressor (air)	72	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	72	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)			
Description	Land Use	Daytime	Evening Night
SFR to the v	Residential	55	55 55

Equipment						
Description	Impact Device	Usage(%)	Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40			77.7	47 0

Results

Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)						
Equipment	*Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq	Day	Evening	Night	Leq	Lmax	Leq
			Lmax	Lmax										
Compressor (air)	78.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	78.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Construction - Highest)

---- Receptor #1 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual
SFR along r	Residential	55	55	55			
					Distance	Receptor	Estimated
					(feet)		Shielding
							(dBA)
Crane	No		16		80.6	80	0
Pneumatic Tools	No		50		85.2	80	0

Results

		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)					
		Day			Evening			Night					
		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane	76.5	68.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	81.1	78.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.1	78.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual
Water Tank	Industrial	55	55	55			
					Distance	Receptor	Estimated
					(feet)		Shielding
							(dBA)
Crane	No		16		80.6	30	5
Pneumatic Tools	No		50		85.2	30	5

Results

		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day			Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80	72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	84.6	81.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.6	82.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual
SFR to the e	Residential	55	55	55			
					Distance	Receptor	Estimated
					(feet)		Shielding
							(dBA)
Crane	No		16		80.6	20	0
Pneumatic Tools	No		50		85.2	20	0

Results

	Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)							
			Day			Evening		Night		Day		Evening		Night
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	88.5	80.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	93.1	90.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	93.1	90.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
* Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual
SFR to the v	Residential	55	55	55			
					Distance	Receptor	Estimated
					(feet)		Shielding
							(dBA)
Crane	No		16		80.6	6	0
Pneumatic Tools	No		50		85.2	6	0

Results

		Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day			Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	99		91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	103.6		100.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	103.6		101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
* Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Construction - Typical)

---- Receptor #1 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual
SFR along r	Residential	55	55	55	Equipment	Spec	Actual
					Lmax	Lmax	Receptor
					(dBA)	(dBA)	Distance
							(feet)
							Estimated
							Shielding
							(dBA)
Crane	No	16			80.6	270	0
Pneumatic Tools	No	50			85.2	270	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		65.9	57.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools		70.5	67.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		70.5	68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
* Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
Water Tank	Industrial	55	55	55			
					Equipment		
	Impact		Spec	Actual	Receptor	Estimated	
	Device	Usage(%)	Lmax	Lmax	Distance	Shielding	
			(dBA)	(dBA)	(feet)	(dBA)	
Crane	No	16		80.6	177	5	
Pneumatic Tools	No	50		85.2	177	5	

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		64.6	56.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools		69.2	66.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		69.2	66.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.													

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
SFR to the e	Residential	55	55	55			
					Equipment		
			Spec	Actual	Receptor	Estimated	
	Impact		Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Crane	No	16		80.6	96	0	
Pneumatic Tools	No	50		85.2	96	0	

Results

		Calculated (dBA)		Noise Limits (dBA)					Noise Limit Exceedance (dBA)						
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		74.9	66.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools		79.5	76.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		79.5	77	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)					
Description	Land Use	Daytime	Evening	Night			
SFR to the v	Residential	55	55	55			
					Equipment		
	Impact		Spec	Actual	Receptor	Estimated	
			Lmax	Lmax	Distance	Shielding	
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)	
Crane	No	16		80.6	47	0	
Pneumatic Tools	No	50		85.2	47	0	

Results

Calculated (dBA)			Noise Limits (dBA)					Noise Limit Exceedance (dBA)					
		Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Crane	81.1	73.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	85.7	82.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.7	83.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.													

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 8/27/2024

Case Desc: Rise Residential (Grading - Highest)

---- Receptor #1 ----

Descriptor Land Use		Baselines (dBA)		
		Daytime	Evening	Night
SFR along r Residential		55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax	Actual Lmax (dBA)		
Drill Rig Truck	No	20		79.1	80	0
Compactor (ground)	No	20		83.2	80	0
Compactor (ground)	No	20		83.2	80	0
Excavator	No	40		80.7	80	0
Excavator	No	40		80.7	80	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	75.1		68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	79.1		72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	79.1		72.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6		72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	76.6		72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	79.1		78.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Descriptor Land Use		Baselines (dBA)		
		Daytime	Evening	Night
Water Tank Industrial		55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax	Actual Lmax (dBA)		
Drill Rig Truck	No	20		79.1	30	0
Compactor (ground)	No	20		83.2	30	0
Compactor (ground)	No	20		83.2	30	0
Excavator	No	40		80.7	30	0
Excavator	No	40		80.7	30	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)					
			Day	Evening		Night	Day	Evening		Night		
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	83.6		76.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	87.7		80.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	87.7		80.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	85.1		81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	85.1		81.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	87.7		87.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.												

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Descriptor Land Use		Baselines (dBA)		
		Daytime	Evening	Night
SFR to the e Residential		55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax	Actual Lmax (dBA)		
Drill Rig Truck	No	20		79.1	20	0
Compactor (ground)	No	20		83.2	20	0
Compactor (ground)	No	20		83.2	20	0
Excavator	No	40		80.7	20	0
Excavator	No	40		80.7	20	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day		Evening		Night		Day		Evening		Night	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck		87.1		80.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)		91.2		84.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)		91.2		84.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		88.7		84.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		88.7		84.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		91.2		90.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Descriptor Land Use		Baselines (dBA)		
		Daytime	Evening	Night
SFR to the e Residential		55	55	55

Description	Impact Device	Usage(%)	Equipment Spec		Receptor Distance (feet)	Estimated Shielding (dBA)
			Lmax	Actual Lmax (dBA)		
Drill Rig Truck	No	20		79.1	6	0
Compactor (ground)	No	20		83.2	6	0
Compactor (ground)	No	20		83.2	6	0
Excavator	No	40		80.7	6	0
Excavator	No	40		80.7	6	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	97.6		90.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	101.6		94.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	101.6		94.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	99.1		95.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	99.1		95.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	101.6		101.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 8/27/2024

Case Desc: Rise Residential (Grading - Typical)

---- Receptor #1 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
SFR along r	Residential	55	55	55

		Equipment				
		Impact	Spec	Actual	Receptor	Estimated
		Device	Usage(%)	Lmax	Lmax	Distance
				(dBA)	(dBA)	(feet)
						Shielding
						(dBA)
Description						
Drill Rig Truck	No	20		79.1	270	0
Compactor (ground)	No	20		83.2	270	0
Compactor (ground)	No	20		83.2	270	0
Excavator	No	40		80.7	270	0
Excavator	No	40		80.7	270	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	64.5		57.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	68.6		61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	68.6		61.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	66.1		62.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	66.1		62.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.6		68.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
Water Tank	Industrial	55	55	55

		Equipment				
		Impact	Spec	Actual	Receptor	Estimated
		Device	Usage(%)	Lmax	Lmax	Distance
				(dBA)	(dBA)	(feet)
						Shielding
						(dBA)
Description						
Drill Rig Truck	No	20		79.1	177	0
Compactor (ground)	No	20		83.2	177	0
Compactor (ground)	No	20		83.2	177	0
Excavator	No	40		80.7	177	0
Excavator	No	40		80.7	177	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	68.2		61.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	72.2		65.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	72.2		65.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	69.7		65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	69.7		65.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	72.2		71.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
SFR to the e	Residential	55	55	55

		Equipment				
		Impact	Spec	Actual	Receptor	Estimated
		Device	Usage(%)	Lmax	Lmax	Distance
				(dBA)	(dBA)	(feet)
						Shielding
						(dBA)
Description						
Drill Rig Truck	No	20		79.1	96	0
Compactor (ground)	No	20		83.2	96	0
Compactor (ground)	No	20		83.2	96	0
Excavator	No	40		80.7	96	0
Excavator	No	40		80.7	96	0

Results

		Calculated (dBA)		Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
				Day		Evening		Night		Day		Evening		Night	
		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Equipment															
Drill Rig Truck		73.5		66.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)		77.6		70.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)		77.6		70.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		75		71.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator		75		71.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		77.6		77.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.															

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Descriptor	Land Use	Daytime	Evening	Night
SFR to the e	Residential	55	55	55

		Equipment				
		Impact	Spec	Actual	Receptor	Estimated
		Device	Usage(%)	Lmax	Lmax	Distance
				(dBA)	(dBA)	(feet)
						Shielding
						(dBA)
Description						
Drill Rig Truck	No	20		79.1	47	0
Compactor (ground)	No	20		83.2	47	0
Compactor (ground)	No	20		83.2	47	0
Excavator	No	40		80.7	47	0
Excavator	No	40		80.7	47	0

Results

Calculated (dBA)			Noise Limits (dBA)				Noise Limit Exceedance (dBA)							
			Day		Evening		Night		Day		Evening		Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Drill Rig Truck	79.7	72.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.8	76.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.8	76.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	81.2	77.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	81.2	77.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	83.8	83.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*Calculated Lmax is the Loudest value.														

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Paving - Highest)

---- Receptor #1 ----

		Baselines (dBA)						
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual	Receptor
SFR along r	Residential	55	55	55		Lmax	Lmax	Distance
						(dBA)	(dBA)	(feet)
								Estimated
								Shielding
								(dBA)
Concrete Mixer Truck	No		40				78.8	80
Concrete Pump Truck	No		20				81.4	80

Results

Calculated (dBA)				Noise Limits (dBA)				Noise Limit Exceedance (dBA)										
Equipment			Day			Evening			Night			Day			Evening			Night
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	
Concrete Mixer Truck	74.7	70.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Concrete Pump Truck	77.3	70.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	77.3	73.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)						
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual	Receptor
Water Tank	Industrial	55	55	55		Lmax	Lmax	Distance
						(dBA)	(dBA)	(feet)
								Estimated
								Shielding
								(dBA)
Concrete Mixer Truck	No		40				78.8	30
Concrete Pump Truck	No		20				81.4	30

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)								
	Day			Evening			Night			Day			Evening			Night		
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Concrete Mixer Truck	78.2		74.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Concrete Pump Truck	80.8		73.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Total	80.8		77.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)						
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual	Receptor
SFR to the e	Residential	55	55	55		Lmax	Lmax	Distance
						(dBA)	(dBA)	(feet)
								Estimated
								Shielding
								(dBA)
Concrete Mixer Truck	No		40				78.8	20
Concrete Pump Truck	No		20				81.4	20

Results

	Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)								
	Day			Evening			Night			Day			Evening			Night		
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Concrete Mixer Truck	86.8	82.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Concrete Pump Truck	89.4	82.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Total	89.4	85.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)						
Description	Land Use	Daytime	Evening	Night	Equipment	Spec	Actual	Receptor
SFR to the v	Residential	55	55	55		Lmax	Lmax	Distance
						(dBA)	(dBA)	(feet)
								Estimated
								Shielding
								(dBA)
Concrete Mixer Truck	No		40				78.8	6
Concrete Pump Truck	No		20				81.4	6

Results

Calculated (dBA)			Noise Limits (dBA)						Noise Limit Exceedance (dBA)					
Equipment	Day		Evening		Night		Day		Evening		Night			
	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq		
Concrete Mixer Truck	97.2	93.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Concrete Pump Truck	99.8	92.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Total	99.8	96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date 9/27/2024

Case Descr Rise Residential (Paving - Typical)

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
SFR along r	Residential	55	55	55
		Equipment		
	Impact	Spec	Actual	Receptor
	Device	Usage(%)	Lmax	Distance
			(dBA)	(feet)
				Shielding
			(dBA)	(dBA)
Concrete Mixer Truck	No	40		78.8
Concrete Pump Truck	No	20		81.4

Results

		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		Day			Evening			Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck		64.2	60.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck		66.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		66.8	63	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Water Tank	Industrial	55	55	55
		Equipment		
	Impact	Spec	Actual	Receptor
	Device	Usage(%)	Lmax	Distance
			(dBA)	(feet)
				Shielding
			(dBA)	(dBA)
Concrete Mixer Truck	No	40		78.8
Concrete Pump Truck	No	20		81.4

Results

		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		Day			Evening			Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck		62.8	58.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck		65.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		65.4	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
SFR to the e	Residential	55	55	55
		Equipment		
	Impact	Spec	Actual	Receptor
	Device	Usage(%)	Lmax	Distance
			(dBA)	(feet)
				Shielding
			(dBA)	(dBA)
Concrete Mixer Truck	No	40		78.8
Concrete Pump Truck	No	20		81.4

Results

		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		Day			Evening			Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck		73.1	69.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck		75.7	68.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		75.7	72	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
SFR to the v	Residential	55	55	55
		Equipment		
	Impact	Spec	Actual	Receptor
	Device	Usage(%)	Lmax	Distance
			(dBA)	(feet)
				Shielding
			(dBA)	(dBA)
Concrete Mixer Truck	No	40		78.8
Concrete Pump Truck	No	20		81.4

Results

		Calculated (dBA)			Noise Limits (dBA)			Noise Limit Exceedance (dBA)		
		Day			Evening			Night		
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Concrete Mixer Truck		79.3	75.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck		81.9	74.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total		81.9	78.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Construction Vibration

Distance	Receptors															
	North				South				East				West			
	Distance to Closest Receiver (ft)				Distance to Closest Receiver (ft)				Distance to Closest Receiver (ft)				Distance to Closest Receiver (ft)			
	150				50				140				64			
	PPV _{vel} (@ 25 ft, in/sec)	PPV _{in/sec}	Level (@ 25 ft, VdB)	L _v (VdB)	PPV _{vel} (@ 25 ft, in/sec)	PPV _{in/sec}	Level (@ 25 ft, VdB)	L _v (VdB)	PPV _{vel} (@ 25 ft, in/sec)	PPV _{in/sec}	Level (@ 25 ft, VdB)	L _v (VdB)	PPV _{vel} (@ 25 ft, in/sec)	PPV _{in/sec}	Level (@ 25 ft, VdB)	L _v (VdB)
Equipment																
Vibratory Roller	0.21	0.014	94	71	0.21	0.074	94	85	0.21	0.023	94	75	0.21	0.066	94	84
Hoe Ram	0.089	0.006	87	64	0.089	0.031	87	78	0.089	0.010	87	68	0.089	0.028	87	77
Large Bulldozer	0.089	0.006	87	64	0.089	0.031	87	78	0.089	0.010	87	68	0.089	0.028	87	77
Caisson Drilling	0.089	0.006	87	64	0.089	0.031	87	78	0.089	0.010	87	68	0.089	0.028	87	77
Loaded Trucks	0.076	0.005	86	63	0.076	0.027	86	77	0.076	0.008	86	67	0.076	0.024	86	76
Jackhammer	0.035	0.002	79	56	0.035	0.012	79	70	0.035	0.004	79	60	0.035	0.011	79	69
Small Bulldozer	0.003	0.000	58	35	0.003	0.001	58	49	0.003	0.000	58	39	0.003	0.001	58	48
Maximum Vibration Levels		0.014				0.074				0.023				0.066		
Vibration Damage Threshold		0.30				0.50				0.30				0.30		
Vibration Annoyance Threshold		0.04				0.04				0.04				0.04		
Exceeds Vibration Damage Threshold?		No				No				No				No		
Exceeds Vibration Annoyance Threshold?		No				Yes				No				Yes		

Structure and Condition

Older residential structures

Human Response

Distinctly perceptible

Source: FTA 2018