

CARLSBAD CLOVIS IRVINE LOS ANGELES PALM SPRINGS POINT RICHMOND RIVERSIDE ROSEVILLE SAN LUIS OBISPO

## MEMORANDUM

DATE:	November 15, 2023
то:	Jazmin Rodriguez, Environmental Project Coordinator, EPD
FROM:	Amy Fischer, Principal Cara Cunningham, Associate
Subject:	Air Quality and Greenhouse Gas Technical Memorandum for the proposed Oakmont Senior Living Project in the City of Corona, California

#### **INTRODUCTION**

LSA has prepared this Air Quality and Greenhouse Gas Technical Memorandum to evaluate the impacts associated with construction and operation of the proposed Oakmont Senior Living Project (project) in Corona, California. This analysis was prepared using methods and assumptions recommended in the air quality impact assessment guidelines of the South Coast Air Quality Management District (SCAQMD) in its *CEQA Air Quality Handbook* (1993) and associated updates. This analysis includes an assessment of criteria pollutant emissions, an assessment of carbon monoxide (CO) hot-spot impacts, and an assessment of the project's greenhouse gas (GHG) emissions.

#### **PROJECT LOCATION AND DESCRIPTION**

The 5.16-acre project site is located at 430 West Foothill Parkway in the City of Corona (City), Riverside County, California, and consists of Assessor's Parcel Numbers (APNs) 114-070-020, 114-070-021, and 114-070-022. Regional access to the project site is provided via Interstate 15 (I-15) and State Route 91 (SR-91). Local access to the project site is provided via West Foothill Parkway. The project site is currently undeveloped and does not include paved access on site. Figure 1, Project Location and Vicinity, and Figure 2, Project Site Plan, are included in Attachment A.

The proposed project would include the construction of a two-story, 109,551 square foot (sq ft) residential care facility building. The proposed residential care facility would consist of 107 units and would include 24-hour care assistance. In addition, the proposed project would provide approximately 35,000 sq ft of common recreational space, including a croquet field (1,500 sq ft), Bocce ball court (1,700 sq ft), pet park (1,020 sq ft) with a shade structure (150 sq ft), orchard with walkway (6,500 sq ft), pickleball court (880 sq ft), garden bed area (1,200 sq ft), memory care patio (4,600 sq ft), and other passive open space areas with paths and benches. The proposed project would provide a total of 107 parking spaces, of which 4 would be handicap parking stalls. The proposed project would also include the development of an internal roadway that would lead to the

parking areas in the northwest and southwest corners of the project site. In addition, the proposed project would generate approximately 264 average daily trips (ADT), including 16 AM trips and 20 PM trips.<sup>1</sup>

Construction would include site preparation, grading, building construction, paving, architectural coating, and the installation of landscaping and irrigation, lighting, storm drain facilities, and underground utilities. Construction of the proposed project is anticipated to commence in the fourth quarter of 2024 and occur for approximately 18 months. Site preparation, grading, and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment. In addition, the construction equipment would utilize Tier 2 engines. Based on the preliminary grading plans, the proposed project would require the net import of approximately 11,500 cubic yards of soil.

#### **EXISTING LAND USES IN THE PROJECT AREA**

For the purposes of this analysis, sensitive receptors are areas of the population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, daycare centers, hospitals, parks, and similar uses that are sensitive to air quality. Impacts on sensitive receptors are of particular concern because those receptors are the population most vulnerable to the effects of air pollution. The project site is surrounded primarily by residential and commercial uses. The areas adjacent to the project site include the following uses: residential uses to the north, commercial uses to the east, parks and open space to the south, and museums and residential uses to the west. The closest sensitive receptors to the project site include the single-family homes located immediately adjacent to the project site to the west at approximately 80 feet and the single-family homes located north of the project site across West Foothill Parkway at approximately 160 feet.

#### **ENVIRONMENTAL SETTING**

#### **Air Quality Background**

Air quality is primarily a function of local climate, local sources of air pollution, and regional pollution transport. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain and, for photochemical pollutants, sunshine.

A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The proposed project is in Riverside County, and is within the jurisdiction of SCAQMD, which regulates air quality in the South Coast Air Basin (Basin).

The Basin comprises approximately 10,000 square miles and covers all of Orange County and the urban parts of Los Angeles, Riverside, and San Bernardino Counties. The Basin is on a coastal plain

<sup>&</sup>lt;sup>1</sup> Environment Planning Development Solutions, Inc. (EPD). 2023. *Trip Generation Screening Analysis for the Oakmont Senior Living Facility*. March 21.

with connecting broad valleys and low hills to the east. Regionally, the Basin is bounded by the Pacific Ocean to the southwest and high mountains to the east, forming the inland perimeter.

Both State and federal governments have established health-based Ambient Air Quality Standards for six criteria air pollutants: CO, ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and suspended particulate matter. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. Two criteria pollutants, O<sub>3</sub> and NO<sub>2</sub>, are considered regional pollutants because they (or their precursors) affect air quality on a regional scale. Pollutants such as CO, SO<sub>2</sub>, and Pb are considered local pollutants that tend to accumulate in the air locally.

Air quality monitoring stations are located throughout the nation and are maintained by the local air districts and State air quality regulating agencies. Data collected at permanent monitoring stations are used by the United State Environmental Protection Agency (USEPA) to identify regions as "attainment" or "nonattainment" depending on whether the regions meet the requirements stated in the applicable National Ambient Air Quality Standards (NAAQS). Nonattainment areas are imposed with additional restrictions as required by the USEPA. In addition, different classifications of attainment (e.g., marginal, moderate, serious, severe, and extreme) are used to classify each air basin in the State on a pollutant-by-pollutant basis. The classifications are used as a foundation to create air quality management strategies to improve air quality and to comply with the NAAQS. As shown in Table A, the Basin is designated as nonattainment by federal standards for O<sub>3</sub> and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and nonattainment by State standards for O<sub>3</sub>, particulate matter less than 10 microns in diameter (PM<sub>10</sub>), and PM<sub>2.5</sub>.

Pollutant	State	Federal
O <sub>3</sub> 1-hour	Nonattainment	N/A
O₃ 8-hour	Nonattainment	Extreme Nonattainment
PM <sub>10</sub>	Nonattainment	Attainment/Maintenance
PM <sub>2.5</sub>	Nonattainment	Nonattainment
CO	Attainment	Attainment/Maintenance
NO <sub>2</sub>	Attainment	Unclassified/Attainment (1-hour)
		Attainment/Maintenance (Annual)
SO <sub>2</sub>	Attainment	Unclassified/Attainment
Lead	Attainment <sup>1</sup>	Unclassified/Attainment <sup>1</sup>
All Others	Attainment/Unclassified	Attainment/Unclassified

Table A: Attainment Status o	f Criteria	<b>Pollutants in the</b>	South Coast Ai	r Basin
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Source 1: NAAQS and CAAQS Attainment Status for South Coast Air Basin (SCAQMD 2016). Website: www.aqmd.gov/docs/ default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf (accessed May 2023). Source 2: Nonattainment Areas for Criteria Pollutants (Green Book) (USEPA 2019). Website: https://www.epa.gov/green-book (accessed May 2023).

 $O_3 = ozone$ 

<sup>1</sup> Only the Los Angeles County portion of the South Coast Air Basin is in nonattainment for lead.

CAAQS = California ambient air quality standards

CO = carbon monoxide

N/A = not applicable

NAAQS = national ambient air quality standards

NO<sub>2</sub> = nitrogen dioxide

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in diameter SCAQMD = South Coast Air Quality Management District SO<sub>2</sub> = sulfur dioxide

PM<sub>10</sub> = particulate matter less than 10 microns in diameter

USEPA = United States Environmental Protection Agency

 $O_3$  levels, as measured by peak concentrations and the number of days over the State 1-hour standard, have declined substantially as a result of aggressive programs by SCAQMD and other regional, State, and federal agencies. The reduction of peak concentrations represents progress in improving public health; however, the Basin still exceeds the State standard for 1-hour and 8-hour  $O_3$  levels. The USEPA lowered the 1997 0.80 parts per million (ppm) national 8-hour ozone standard to 0.75 ppm in 2008 and then to 0.70 ppm on October 1, 2015. The Basin is classified as nonattainment for the 1-hour and 8-hour ozone standards at the State and federal level. During the 2020–2022 period, the Mira Loma Air Monitoring Station located at 5130 Poinsettia Place (the closest monitoring station to the project site) recorded the following exceedances of the State and federal 1-hour and 8-hour  $O_3$  standards:<sup>2</sup>

- The federal 8-hour ozone standard had 89 exceedances in 2020, 53 exceedances in 2021, and 57 exceedances in 2022.
- The State 8-hour ozone standard had 96 exceedances in 2020, 59 exceedances in 2021, and an unknown number of exceedances in 2022.
- The federal 1-hour ozone standard had 7 exceedances in 2020, and no exceedances in 2021 and 2022.
- The State 1-hour ozone standard had 51 exceedances in 2020, 20 exceedances in 2021, and an unknown number of exceedances in 2022.

National and State standards have also been established for  $PM_{2.5}$  over 24-hour and yearly averaging periods.  $PM_{2.5}$ , because of the small size of individual particles, can be especially harmful to human health.  $PM_{2.5}$  is emitted by common combustion sources such as cars, trucks, buses, and power plants, in addition to ground-disturbing activities. On December 17, 2006, the USEPA strengthened the 24-hour  $PM_{2.5}$  NAAQS from 65 micrograms per cubic meter ( $\mu$ g/m<sup>3</sup>) to 35  $\mu$ g/m<sup>3</sup>, and the Basin was subsequently designated "moderate" nonattainment for 2006 24-hour  $PM_{2.5}$  NAAQS on December 14, 2009. The Basin is also considered a nonattainment area for the  $PM_{2.5}$  standard at the State level. During the 2020–2022 time period, the Mira Loma Monitoring Station recorded the following exceedances of the federal 24-hour  $PM_{2.5}$  standards. The State 24-hour  $PM_{2.5}$  standards had no exceedances in the 3-year period:

• The federal 24-hour PM<sub>2.5</sub> standard had 12 exceedances in 2020, 13 exceedances in 2021, and an unknown number of exceedances in 2022.

The Basin is classified as a  $PM_{10}$  nonattainment area at the State level and was redesignated from serious nonattainment to attainment of the federal  $PM_{10}$  standard on July 26, 2013. Because the Basin was redesignated from nonattainment to attainment, a  $PM_{10}$  maintenance plan was adopted in 2013 and is required to be updated every 10 years. From 2020 to 2022, the Mira Loma Air

<sup>&</sup>lt;sup>2</sup> California Air Resources Board (CARB). 2020. iADAM Air Quality Data Statistics. Website: https://www.arb. ca.gov/adam/topfour/topfour1.php (accessed May 2023).

Monitoring Station recorded the following exceedances of the State and federal 24-hour  $PM_{10}$  standard. The federal 24-hour  $PM_{10}$  standard had no exceedances in the 3-year period:

- The federal 24-hour PM<sub>10</sub> standard had 1 exceedance in 2020 and no exceedances in 2021 and 2022.
- The State 24-hour PM<sub>10</sub> standard had 16 exceedances in 2020, 15 exceedances in 2021, and an unknown number of exceedances in 2022.

All areas of the Basin have continued to remain below the federal CO standards (35 ppm 1-hour and 9 ppm 8-hour) since 2003. The EPA redesignated the Basin to attainment of the federal CO standards, effective June 11, 2017. The Basin is also well below the State CO standards (20 ppm 1-hour CO and 9 ppm 8-hour CO).

#### **Greenhouse Gas Background**

GHGs are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although manmade GHGs include naturally occurring GHGs such as carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), and nitrous oxide ( $N_2O$ ), some gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride ( $NF_3$ ), and sulfur hexafluoride ( $SF_6$ ) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO<sub>2</sub>, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO<sub>2</sub> over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO<sub>2</sub> equivalents" (CO<sub>2</sub>e).

#### **REGULATORY SETTING**

This section provides regulatory background information for air quality and GHGs.

#### **Air Quality**

Applicable federal, State, regional, and local air quality regulations are discussed below.

#### Federal Regulations

The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, State and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

#### State Regulations

In 1988, the California Clean Air Act (CCAA) required that all air districts in the State endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O<sub>3</sub>, SO<sub>2</sub>, and NO<sub>2</sub> by the earliest practical date. The CCAA provides districts with the authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the State standards for these pollutants are more stringent than the national standards.

The California Air Resources Board (CARB) is the State's "clean air agency." CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

#### **Regional Regulations**

The proposed project would be required to comply with regional rules that assist in reducing shortterm air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best available control measures so the presence of such dust does not remain visible in the atmosphere beyond the property line of the emissions source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. SCAQMD Rule 1113 limits the volatile organic compound (VOC) content of architectural coatings. Applicable dust suppression techniques from SCAQMD Rule 403 and low VOC content in paints under SCAQMD Rule 1113 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM<sub>10</sub> component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

#### South Coast Air Quality Management District Rule 403 Measures.

• Water active sites at least twice times daily (locations where grading is to occur will be thoroughly watered prior to earthmoving).

- All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least 2 feet of freeboard in accordance with the requirements of California Vehicle Code Section 23114 (freeboard means vertical space between the top of the load and top of the trailer).
- Traffic speeds on all unpaved roads shall be reduced to 15 miles per hour or less.

**South Coast Air Quality Management District Rule 1113 Measures.** SCAQMD Rule 1113 governs the sale, use, and manufacture of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction and operation of the proposed project. Therefore, all paints and solvents used during construction and operation of the proposed project must comply with SCAQMD Rule 1113.

#### Local Regulations

**City of Corona General Plan 2020–2040.** The City of Corona addresses air quality in the Environmental Resources Element of its General Plan 2020–2040.<sup>3</sup> The Environmental Resources Element includes goals and policies that work to improve air quality within the Corona planning area by controlling point sources, reducing vehicle trips, implementing efficient land use planning and construction practices, and energy conservation. The following policies from the Environmental Resources Element are applicable to the proposed project:

- **ER-12.1:** Promote and encourage alternate employment work schedules for public and privatesector businesses to achieve a reduction of employee related motor vehicle emissions in accordance with SCAQMD Rule 2202.
- **ER-12.2**: Continue to cooperate with the SCAQMD and other local authorities in the air basin, in implementing air emission reduction programs and techniques.
- **ER-12.12:** Provide effective utility of pedestrian and cycling paths/trails and place strong limitations on intrusions into these rights-of-way used for pedestrian and bicycling.
- **ER-12.13:** Reduce particulate emissions from paved and unpaved roads, parking lots, and road and building construction through the implementation of best practices as deemed feasible by the City of Corona.
- **ER-12.14:** Reduce energy consumed by commercial and residential uses by requiring the use and installation of energy conservation features in all new construction projects and wherever feasible, retrofitting existing and redevelopment projects.

<sup>&</sup>lt;sup>3</sup> City of Corona. 2020. *City of Corona General Plan 2020–2040.* June 3. Website: 638157045404770000 (coronaca.gov) (accessed May 2023).

#### **Greenhouse Gas Emissions**

This section describes regulations related to global climate change at the federal, State, and local levels.

#### Federal Regulations

The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate  $CO_2$  emissions under the CAA.

Although there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change, including the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the CAA, finding that seven GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, NF<sub>3</sub>, PFCs, and SF<sub>6</sub>) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

#### State Regulations

CARB is the lead agency for implementing climate change regulations in the State. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the State are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is Assembly Bill (AB) 32, passed by the State legislature on August 31, 2006. This effort set a GHG emission reduction target to reduce GHG emissions to 1990 levels by 2020. CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO<sub>2</sub>e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. CARB approved the Scoping Plan on December 11, 2008. It contains the main strategies California will implement to achieve the reduction of approximately 169 MMT of CO<sub>2</sub>e, or approximately 30 percent, from the State's projected 2020 emission level of 596 MMT of CO<sub>2</sub>e under a business-as-usual scenario (this is a reduction of 42 MMT of CO<sub>2</sub>e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB recommended GHG reductions for each emissions sector of the State's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reduction of 31.7 MMT CO<sub>2</sub>e);
- The Low-Carbon Fuel Standard (15.0 MMT CO₂e);

- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO<sub>2</sub>e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO<sub>2</sub>e).

The Scoping Plan identifies 18 emission reduction measures that address cap-and-trade programs, vehicle gas standards, energy efficiency, low carbon fuel standards, renewable energy, regional transportation-related GHG targets, vehicle efficiency measures, goods movement, solar roof programs, industrial emissions, high-speed rail, green building strategies, recycling, sustainable forests, water, and air. The measures would result in a total reduction of 174 MMT of CO<sub>2</sub>e by 2020.

On August 24, 2011, CARB unanimously approved both the new supplemental assessment and reapproved its Scoping Plan, which provides the overall roadmap and rule measures to carry out AB 32. CARB also approved a more robust California Environmental Quality Act (CEQA) equivalent document supporting the supplemental analysis of the cap-and-trade program. The cap-and-trade took effect on January 1, 2012, with an enforceable compliance obligation that began January 1, 2013.

CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB's climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in Executive Orders (EOs) S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the State's "longer-term" GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan,<sup>4</sup> to reflect the 2030 target set by EO B-30-15 and codified by Senate Bill (SB) 32.

The 2022 Scoping Plan<sup>5</sup> was approved in December 2022 and assesses progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 375 (2008). Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, CARB-approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). CARB may update the targets every 4 years and must

<sup>&</sup>lt;sup>4</sup> CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

<sup>&</sup>lt;sup>5</sup> CARB. 2021. 2022 Scoping Plan Update. May 10. Website: https://ww2.arb.ca.gov/sites/default/files/ 2022-12/2022-sp.pdf (accessed May 2023).

update them every 8 years. MPOs, in turn, must demonstrate how their plans, policies and transportation investments meet the targets set by CARB through Sustainable Community Strategies (SCS). The SCSs are included with the Regional Transportation Plan, a report required by State law. However, if an MPO finds that its SCS will not meet the GHG reduction targets, it may prepare an Alternative Planning Strategy. The Alternative Planning Strategy identifies the impediments to achieving the targets.

**Executive Order B-30-15 (2015).** Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

• GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and, therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

**Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act.** SB 350, signed by Governor Jerry Brown on October 7, 2015, updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission (CPUC) for the private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other nonrenewable resources. The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by this legislation requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016 the Legislature passed, and the Governor signed, SB 32 and AB 197. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an Intergovernmental Panel on Climate Change (IPCC) analysis of the emission trajectory that would stabilize atmospheric GHG concentrations at 450 ppm CO<sub>2</sub>e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

**Senate Bill 100.** On September 10, 2018, Governor Brown signed SB 100, which raises California's renewable portfolio standard requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the Western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

**Executive Order B-55-18.** EO B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." EO B-55-18 directs CARB to work with relevant State agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO<sub>2</sub>e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

**Title 24, Building Efficiencies Standards and the California Green Building Standards Code.** In November 2008, the California Building Standards Commission established the California Green Building Standards Code (CALGreen Code) (California Code of Regulations, Title 24, Part 11), which sets performance standards for residential and nonresidential development to reduce environmental impacts and to encourage sustainable construction practices. The CALGreen Code addresses energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2022 to include new mandatory measures for residential and nonresidential uses. These measures took effect January 1, 2023.

#### **Regional Regulations**

**Southern California Association of Governments.** The Southern California Association of Governments (SCAG) is a regional council consisting of the following six counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. In total, the SCAG region encompasses 191 cities and over 38,000 square miles within Southern California. SCAG is the MPO serving the region under federal law and serves as the Joint Powers Authority, the Regional Transportation Planning Agency, and the Council of Governments under State law. As the Regional Transportation Planning Agency, SCAG prepares long-range transportation plans for the Southern California region, including the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the 2008 Regional Comprehensive Plan (RCP).

On September 3, 2020, SCAG adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).<sup>6</sup> In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles.<sup>7</sup> However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

**South Coast Air Quality Management District.** In 2008, the South Coast Air Quality Management District (SCAQMD) formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD 2008 draft guidance document titled *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* (2008) that could be applied by lead agencies. On September 28, 2010, SCAQMD Working Group Meeting No.15 provided further guidance, including a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. SCAQMD has not presented a finalized version of these thresholds to the governing board.

SCAQMD identifies the emissions level for which a project would not be expected to substantially conflict with any State legislation adopted to reduce statewide GHG emissions. As such, the utilization of a service population represents the rates of emissions needed to achieve a fair share of the State's mandated emissions reductions. Overall, SCAQMD identifies a GHG efficiency level that, when applied statewide or to a defined geographic area, would meet the 2020 and post-2020 emission targets as required by AB 32 and SB 32. If projects are able to achieve targeted rates of emissions per the service population, the State would be able to accommodate expected population growth and achieve economic development objectives while also abiding by AB 32's emissions target and future post-2020 targets. The SCAQMD has established a flow chart for evaluating GHG significance and indicates that when a project is exempt from CEQA, no further analysis is required.

<sup>&</sup>lt;sup>6</sup> Southern California Association of Governments (SCAG). 2020. Connect SoCal: The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments. Website: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan\_0. pdf?1606001176 (accessed May 2023).

<sup>&</sup>lt;sup>7</sup> Ibid.

#### Local Regulations

**City of Corona General Plan 2020–2040.** The City of Corona addresses greenhouse gases in the Environmental Resources Element of its General Plan 2020–2040.<sup>8</sup> The Environmental Resources Element includes goals and policies that are working to reduce GHG emissions from City operations and community-wide sources 15 percent below 2008 levels by 2020, 49 percent below 2008 levels by 2030, and 66 percent below 2008 levels by 2040. The following policies are applicable to the proposed project:

- **ER-13.2:** Encourage the maximum feasible energy efficiency in site design, building orientation, landscaping, and utilities/infrastructure for all development and redevelopment projects (residential, commercial, industrial, and public agency) to support GHG emissions reductions.
- **ER-13.3:** Evaluate opportunities to reduce energy use and the urban heat island effect through site and building design, materials, and landscaping, such as reflective roofs or pavement, vegetated roofs, pervious pavement, shade trees, and revegetation of paved areas.
- **ER-13.4:** Support the increase of clean energy supply to existing and new development and municipal facilities through means to include, but not be limited to onsite or other local renewable energy sources for new and existing buildings and infrastructure.
- **ER-13.6:** Reduce solid waste sent to the landfills and associated community-wide GHG emissions by ensuring all properties have access to curbside solid waste, recycled materials, and green/organic waste programs; target special programs for construction debris, household hazardous waste, etc.
- **ER-13.7:** Support a wide variety of transportation related measures (e.g., active transportation, increased bus and rail transit, transportation system and demand management, etc.) as articulated in the Circulation Element to reduce the number of vehicle miles traveled in Corona.

**Corona Climate Action Plan Update (2019).** The City of Corona Climate Action Update (CAP Update)<sup>9</sup> is a comprehensive planning document outlining the City's proposed approach to reduce Corona's impact on the climate by reducing GHG emissions. The City of Corona is committed to planning sustainably for the future while ensuring a livable, equitable, and economically vibrant community. Planning sustainably includes acknowledging the local role in climate change and how the City can mitigate their emissions and prepare for anticipated climate-related changes. As such, the City has implemented a number of sustainability and conservation efforts and seeks to continue those efforts through local planning and partnerships. The CAP Update integrates the City's past and

<sup>&</sup>lt;sup>8</sup> City of Corona. 2020. *City of Corona General Plan 2020–2040.* June 3. Website: 638157045404770000 (coronaca.gov) (accessed May 2023).

<sup>&</sup>lt;sup>9</sup> City of Corona. 2019. *City of Corona Climate Action Plan Update*. March. Website: 637239353962070000 (coronaca.gov) (accessed May 2023).

current efforts with future efforts to grow and thrive sustainably. The following GHG goals and reduction strategies from the CAP Update are applicable to the proposed project:

- 2.1. Exceed Energy Efficiency Standards
- 5.1. Water Efficiency though Enhanced Implementation of Senate Bill X7-7
- 5.2. Exceed Water Efficiency Standards
- 6.1. Tree Planting for Shading and Energy Saving
- 6.2. Light Reflecting Surfaces for Energy Saving
- 7.1. Alternative Transportation Options
- 8.1. Reduce Waste to Landfills
- 9.1. Clean Energy

In addition, the CAP Update includes Screening Tables to be used for future projects to determine their consistency with the CAP Update.

#### **METHODOLOGY**

#### **Construction Emissions**

Construction activities can generate a substantial amount of air pollution. Construction activities are considered temporary; however, short-term impacts can contribute to exceedances of air quality standards. Construction activities include demolition, site preparation, earthmoving, and general construction. The emissions generated from these common construction activities include fugitive dust from soil disturbance, fuel combustion from mobile heavy-duty, diesel- and gasoline-powered equipment, portable auxiliary equipment, and worker commute trips.

The California Emissions Estimator Model version 2022.1 (CalEEMod) computer program was used to calculate emissions from on-site construction equipment and emissions from worker and vehicle trips to the site. Construction of the proposed project would begin in the fourth quarter of 2024 and would occur for approximately 18 months. This analysis assumes the use of Tier 2 construction equipment and that the proposed project would comply with SCAQMD Rule 403 measures. Grading and building activities would involve the use of standard earthmoving equipment such as large excavators, cranes, and other related equipment. Based on the preliminary grading plans, the proposed project would require the net import of approximately 11,500 cubic yards of soil. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used.

#### **Operational Emissions**

This air quality analysis includes estimating emissions associated with long-term operation of the project. Indirect emissions of criteria pollutants with regional impacts would be emitted by project-generated vehicle trips. In addition, localized air quality impacts (i.e., higher carbon monoxide concentrations or "hot-spots") near intersections or roadway segments in the project vicinity would also potentially occur due to project-generated vehicle trips.

Consistent with SCAQMD guidance for estimating emissions associated with land use development projects, the CalEEMod computer program was used to calculate the long-term operational emissions associated with the project. As previously discussed in the Project Location and Description section, the proposed project would include the construction of a two-story, 109,551 sq ft residential care facility building that would consist of 107 units and would include 24-hour care assistance. In addition, the proposed project would provide 107 parking spaces.<sup>10</sup> The proposed project analysis was conducted using land use codes *Congregate Care (Assisted Living)*<sup>11</sup> and *Parking Lot.* Trip generation rates used in CalEEMod for the project would generate approximately 264 average daily trips.<sup>12</sup> When project-specific data were not available, default assumptions from CalEEMod were used to estimate project emissions.

#### **Greenhouse Gas Emissions**

GHG emissions associated with the project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust. There would also be long-term GHG emissions associated with project-related vehicular trips. Recognizing that the field of global climate change analysis is rapidly evolving, the approaches advocated most recently indicate that, for determining a project's contribution to GHG emissions, lead agencies should calculate, or estimate, emissions from vehicular traffic, energy consumption, water conveyance and treatment, waste generation, construction activities, and any other significant source of emissions within the project area. The CalEEMod results were used to quantify GHG emissions generated by the project.

### THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse air quality impact if project-generated pollutant emissions would do any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project is nonattainment under applicable federal or State ambient air quality standards;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) affecting a substantial number of people.

<sup>&</sup>lt;sup>10</sup> The CalEEMod analysis was based on an older version of the site plan that included 72 parking spaces. The difference in parking spaces was reviewed by LSA and it was determined that the difference would result in nominal air quality and GHG emissions and would not result in more severe impacts than what is described within.

<sup>&</sup>lt;sup>11</sup> Consistent with Institute of Transportation Engineers (ITE) Land Use Code 255 Continuing Care Retirement Community.

<sup>&</sup>lt;sup>12</sup> EPD. 2023. *Trip Generation Screening Analysis for the Oakmont Senior Living Facility*. March 21.

Certain air districts (e.g., SCAQMD) have created guidelines and requirements to conduct air quality analysis. The SCAQMD's current guidelines, the *CEQA Air Quality Handbook*<sup>13</sup> with associated updates, were followed in this assessment of air quality impacts for the proposed project.

#### **Regional Emissions Thresholds**

SCAQMD has established daily emission thresholds for construction and operation of proposed projects in the Basin. The emission thresholds were established based on the attainment status of the Basin with regard to air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emission thresholds are regarded as conservative and would overstate an individual project's contribution to health risks. Table B lists the CEQA significance thresholds for construction and operational emissions established for the Basin.

### **Table B: Regional Thresholds for Construction and Operational Emissions**

Emissions Sourco		Pollutant Emissions Threshold (lbs/day)								
Emissions Source	VOCs         NO <sub>X</sub> CO         PM <sub>10</sub> PM <sub>2.5</sub> SO <sub>X</sub>									
Construction	75	100	550	150	55	150				
Operations	55	55	550	150	55	150				
Source: Air Quality Significance Thresholds (SCAQMD, April 2019). Website: http://www.agmd.gov/docs/default-										

 Source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2 (accessed May 2023).

 CO = carbon monoxide  $PM_{10} = particulate matter less than 10 microns in size

 <math>Ibs/day = pounds per day$  SCAQMD = South Coast Air Quality Management District

 <math>NOx = nitrogen oxides SOx = sulfur oxides 

  $PM_{2.5} = particulate matter less than 2.5 microns in size
 VOCs = volatile organic compound$ 

Projects in the Basin with construction- or operation-related emissions that exceed any of their respective emission thresholds would be considered significant under SCAQMD guidelines. These thresholds, which the SCAQMD developed and that apply throughout the Basin, apply as both project and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

#### Local Microscale Concentration Standards

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and federal CO standards. Because ambient CO levels are below the standards throughout the Basin, a project would be considered to have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

• California State 1-hour CO standard of 20 ppm; and

<sup>&</sup>lt;sup>13</sup> South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/ceqa-air-qualityhandbook-(1993) (accessed May 2023).

• California State 8-hour CO standard of 9 ppm.

#### **Localized Impacts Analysis**

SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of air quality impacts to nearby sensitive receptors.<sup>14</sup> This guidance was used to analyze potential localized air quality impacts associated with construction of the proposed project. Localized significance thresholds (LSTs) are developed based on the size or total area of the emission source, the ambient air quality in the source receptor area, and the distance to the project. Sensitive receptors include residences, schools, hospitals, and similar uses that are sensitive to adverse air quality.

LSTs are based on the ambient concentrations of that pollutant within the project Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. For the proposed project, the appropriate SRA for the LST is the Norco/Corona area (SRA 22). SCAQMD provides LST screening tables for 25-, 50-, 100-, 200-, and 500-meter source-receptor distances. As identified above, the closest sensitive receptors to the project site include the single-family homes located immediately adjacent to the project site to the west at approximately 80 feet. An LST analysis was completed to show the construction and operational impacts at a distance of 25 meters (80 feet) to the nearest sensitive receptors. Based on the anticipated construction equipment, it is assumed that the maximum daily disturbed acreage for the proposed project would be 3.5 acres or less. Table C lists the emissions thresholds that apply during project construction and operation.

Emissions Source	Pollutant Emissions Threshold (lbs/day)						
Emissions source	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>			
Construction (3.5-acres, 25-meter distance)	220.0	1,354.0	9.0	6.5			
Operations (3.5-acres, 25-meter distance)	220.0	1,354.0	2.5	2.0			
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#### Table C: SCAQMD Localized Significance Thresholds

 Source: Final Localized Significance Threshold Methodology (SCAQMD, July 2008).
 PM10 = particulate matter less than 10 microns in size

 Ibs/day = pounds per day
 PM2.5 = particulate matter less than 2.5 microns in size

 NOx = nitrogen oxides
 SCAQMD = South Coast Air Quality Management District

#### **Greenhouse Gas Thresholds**

The *State CEQA Guidelines* indicate that a project would normally have a significant adverse GHG emissions impact if the project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reduction the emissions of greenhouse gases.

<sup>&</sup>lt;sup>14</sup> SCAQMD. 2008. *Final Localized Significance Threshold Methodology*. July.

Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a Statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting held in September 2010 (Meeting No. 15), SCAQMD proposed to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2. Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening-level threshold, project-level and cumulative GHG emissions are less than significant.
- Tier 4. Performance Standards: If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposes proposed a 2020 efficiency target of 4.8 MT CO<sub>2</sub>e per year per service population for project-level analyses and 6.6 MT CO<sub>2</sub>e per year per service population for projects (e.g., program-level projects such as General Plans).

The City of Corona CAP Update meets the requirements of *State CEQA Guidelines*, Section 15183.5. As discussed in the City's CAP Update, the analysis of development projects can either be done through emissions calculations or by using the CAP Update's screening tables. As such, for the purpose of this analysis, the proposed project will be compared to the screening-level Tier 3 Numerical Screening Threshold of 3,000 MT CO<sub>2</sub>e per year. The project is also evaluated for compliance with the City's CAP Update, the 2022 Scoping Plan, and the 2020–2045 RTP/SCS.

#### **IMPACT ANALYSIS**

This section identifies potential air quality and GHG impacts associated with implementation of the proposed project.

#### **Air Quality Impacts**

Air pollutant emissions associated with the project would occur over the short term from construction activities and over the long term from project-related vehicular trips and due to energy consumption (e.g., electricity and natural gas usage) by the proposed land uses.

#### Consistency with Applicable Air Quality Plans

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. A consistency determination fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans.

The proposed project would include the construction of a two-story, 109,551 sq ft residential care facility building that would consist of 107 units. The proposed project is not considered a project of statewide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential development of more than 500 dwelling units, shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 sq ft of floor space) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, §15206(b)). Because the proposed project would not be defined as a regionally significant project under CEQA, it does not meet the SCAG Intergovernmental Review criteria.

The City's General Plan is consistent with the SCAG Regional Comprehensive Plan Guidelines and the SCAQMD Air Quality Management Plan (AQMP). Pursuant to the methodology provided in the SCAQMD's *CEQA Air Quality Handbook*, consistency with the Basin 2022 AQMP is affirmed when a project (1) would not increase the frequency or severity of an air quality standards violation or cause a new violation, and (2) is consistent with the growth assumptions in the AQMP. Consistency review is presented as follows:

- The project would result in short-term construction and long-term operational pollutant emissions that are all less than the CEQA significance emissions thresholds established by SCAQMD, as demonstrated below; therefore, the project would not result in an increase in the frequency or severity of an air quality standards violation or cause a new air quality standards violation.
- 2. The *CEQA Air Quality Handbook* indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and significant projects.

Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities; therefore, the proposed project is not defined as significant. The project site has an existing General Plan land use designation of General Commercial (G-C) and a zoning designation of Commercial (C-3) and is within two specific plans, the Mountain Gate Specific Plan and the South Corona Community Facilities Plan. Therefore, the proposed project would require a Specific Plan Amendment (SPA) to the South Corona Community Facilities Plan to change the land use from General Commercial (G-C) to High Density Residential, a SPA to add Senior Citizen Residential to the Mountain Gate Specific Plan and change the land use from Commercial, and a Site Plan Review. As such, this analysis evaluates whether the project would exceed the 2022 AQMP's assumptions for 2040.

With respect to determining the proposed project consistency with the air quality plan growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2020–2045 RTP/SCS, the City's population, households, and employment are forecast to increase by approximately 19,300 residents, 5,500 households, and 13,600 jobs, respectively, between 2016 and 2045.<sup>15</sup> The proposed project would include the construction of a two-story residential care facility building of approximately 107 units. According to the 2021 American Housing Survey (AHS), the average household size in Riverside County from 2017–2021 is 3.2 persons<sup>16</sup>. The senior housing uses are not a typical residential use and would likely attract existing residents that already live in the City and surrounding areas rather than inducing new population growth from outside the area; however, this analysis conservatively assumes 3.2 persons per household. Therefore, the proposed 107 units would result in an increase in 342 residents. The additional 342 residents would fall within the 5,500 residents projected for the City. Therefore, it is assumed that the project would not substantially increase population, households, or employment in the City. As such, the project would be consistent with SCAG's goals for new population growth in the region.

In addition, since the proposed project would not include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities, the proposed project is not defined as a significant project as defined by the SCAQMD's *CEQA Air Quality Handbook* 

Based on the consistency analysis presented above, the proposed project would be consistent with the regional AQMP.

<sup>&</sup>lt;sup>15</sup> SCAG. 2020. Op cit.

<sup>&</sup>lt;sup>16</sup> United States Census Bureau. 2021. *Quick Facts Riverside County, California*. Website: U.S. Census Bureau QuickFacts: California (accessed May 2023)

#### Criteria Pollutant Analysis

The South Coast Air Basin is currently designated as nonattainment for the federal and State standards for O<sub>3</sub> and PM<sub>2.5</sub>. In addition, the Basin is in nonattainment for the PM<sub>10</sub> standard. The Basin's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of an ambient air quality standard. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, SCAQMD considered the emissions levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Therefore, additional analysis to assess cumulative impacts is not necessary. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project.

**Construction Emissions.** During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by demolition, grading, building construction, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, nitrogen oxides (NO<sub>x</sub>), VOCs, directly emitted PM<sub>2.5</sub> or PM<sub>10</sub>, and toxic air contaminants such as diesel exhaust particulate matter.

Project construction activities would include grading, site preparation, building construction, architectural coating, and paving activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and amount of operating equipment. Larger dust particles would settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. The Rule 403 measures that were incorporated in this analysis include:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

In addition to dust-related PM<sub>10</sub> emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, sulfur oxides (SO<sub>x</sub>), NO<sub>x</sub>, VOCs, and some soot particulate (PM<sub>2.5</sub> and PM<sub>10</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. These emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod and summarized in Table D. Attachment B provides CalEEMod output sheets.

		Maximum Daily Regional Pollutant Emissions (lbs/day)								
					Fugitive	Exhaust	Fugitive	Exhaust		
Construction Phase	VOCs	NOx	со	SOx	PM10	PM10	PM <sub>2.5</sub>	PM <sub>2.5</sub>		
Site Preparation	1.2	40.0	29.4	<0.1	7.9	1.1	4.0	1.0		
Grading	0.9	28.0	19.8	0.1	4.0	0.8	1.7	0.8		
Building Construction	1.0	19.7	19.3	<0.1	1.1	0.7	0.3	0.6		
Paving	0.6	13.4	11.4	<0.1	0.2	0.6	<0.1	0.5		
Architectural Coating	4.4	1.1	2.1	<0.1	0.2	0.1	<0.1	0.1		
Peak Daily Emissions	ns 5.4 40.0 29.4		0.1	9.0		5.0				
SCAQMD Threshold	75.0	100.0	550.0	150.0	150.0		55.0			
Significant?	No	No	No	No	No		N	lo		

#### **Table D: Short-Term Regional Construction Emissions**

Source: Compiled by LSA (May 2023).

Note = Some values may not appear to add correctly due to rounding. Maximum emissions of VOC occurred during the overlapping building construction and architectural coating phases.

CO = carbon monoxide

lbs/day = pounds per day

NO<sub>x</sub> = nitrogen oxides

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size SCAQMD = South Coast Air Quality Management District SO<sub>x</sub> = sulfur oxides VOCs = volatile organic compounds

**Operational Air Quality Impacts.** Long-term air pollutant emissions associated with operation of the proposed project include emissions from area, energy, and mobile sources. Area-source emissions include architectural coatings, consumer products, and landscaping. Energy-source emissions result from activities in buildings that use natural gas. Mobile-source emissions are from vehicle trips associated with operation of the project. Area-source emissions consist of direct sources of air emissions at the project site, including architectural coatings, consumer products, and use of landscape maintenance equipment.

PM<sub>10</sub> emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM<sub>10</sub> occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other particulate matter emissions processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles.

Energy-source emissions result from activities in buildings that use natural gas. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emissions factor of the fuel source. The primary sources of energy demand for the proposed project would include building mechanical systems such as water and space heating. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions.

Long-term operational emissions associated with the proposed project were calculated using CalEEMod. Table E provides the estimated existing emission estimates and the proposed project's estimated operational emissions. Attachment B provides CalEEMod output sheets.

		Pollutant Emissions (lbs/day)						
Emission Type	VOCs	NOx	СО	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>		
Mobile Sources	1.0	0.9	7.7	<0.1	0.7	0.1		
Area Sources	3.1	0.1	6.1	<0.1	<0.1	<0.1		
Energy Sources	<0.1	0.4	0.2	<0.1	<0.1	<0.1		
Total Project Emissions	4.1	1.4	14.0	<0.1	0.7	0.1		
SCAQMD Threshold	55.0	55.0	550.0	150.0	150.0	55.0		
Exceeds Threshold?	No	No	No	No	No	No		

#### **Table E: Project Operational Emissions**

Source: Compiled by LSA (May 2023).

Notes: Some values may not appear to add correctly due to rounding. Actual net new mobile source emissions would be less than estimated because project would have 45 net new vehicle trips when compared to the existing uses.

CO = carbon monoxide

lbs/day = pounds per day

 $NO_x = nitrogen oxides$ 

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

PM<sub>10</sub> = particulate matter less than 10 microns in size SCAQMD = South Coast Air Quality Management District SO<sub>x</sub> = sulfur oxides VOCs = volatile organic compounds

The results shown in Table E indicate the proposed project would result in a reduction in emissions when compared to existing conditions. The project would not exceed the significance criteria for daily VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State AAQS.

**Long-Term Microscale (CO Hot Spot) Analysis.** Vehicular trips associated with the proposed project would contribute to congestion at intersections and along roadway segments in the vicinity of the proposed project site. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, it disperses rapidly with

distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients).

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels.

An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected. Existing CO concentrations in the immediate project vicinity are not available. Ambient CO levels monitored at the Mira Loma Air Monitoring Station located at 5130 Poinsettia Place (the closest station to the project site), showed a highest recorded 1-hour concentration of 2.0 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 1.6 ppm (the State standard is 9 ppm) from 2020 to 2022. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. Reduced speeds and vehicular congestion at intersections result in increased CO emissions.

The proposed project is expected to generate 264 average daily trips, with 16 trips occurring in the AM peak hour and 20 trips occurring in the PM peak hour. As the proposed project would not generate 100 or more AM or PM peak hour trips, the proposed project did not meet the criteria for an evaluation of study area intersection or roadway segment level of service. Therefore, given the extremely low level of CO concentrations in the project area and the lack of traffic impacts at any intersections, project-related vehicles are not expected to result in CO concentrations exceeding the State or federal CO standards. No CO hot spots would occur, and the project would not result in any project-related impacts on CO concentrations.

#### Health Risk on Nearby Sensitive Receptors

Sensitive receptors are defined as people who have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential dwelling units. As discussed above, the closest sensitive receptors to the project site include the single-family homes located immediately adjacent to the project site to the north and east. LST analysis was completed to show the construction and operational impacts at 25 meters (80 feet) to the nearest sensitive receptors to the project site in SRA 22, based on a 3.5-acre daily disturbance area and a 5.16-acre project site. Tables F and G show the results of the LST analysis during project construction and operation, respectively.

#### **Table F: Project Localized Construction Emissions**

	Pollutant Emissions (lbs/day)						
Source	NOx	СО	PM10	PM <sub>2.5</sub>			
On-Site Emissions	40.0	28.3	8.8	5.0			
Localized Significance Threshold	220.0	1,354.0	9.0	6.5			
Significant?	No	No	No	No			

Source: Compiled by LSA (May 2023).

Note: Source Receptor Area 22, based on a 3.5-acre construction disturbance daily area, at a distance of 78 feet from the project boundary.

CO = carbon monoxide

 $PM_{2.5}$  = particulate matter less than 2.5 microns in size

lbs/day = pounds per day NO<sub>x</sub> = nitrogen oxides

PM<sub>10</sub> = particulate matter less than 10 microns in size

#### **Table G: Project Localized Operational Emissions**

	Pollutant Emissions (lbs/day)					
Source	NO <sub>x</sub>	СО	PM <sub>10</sub>	PM <sub>2.5</sub>		
On-Site Emissions	0.5	6.7	<0.1	<0.1		
Localized Significance Thresholds	220.0	1,354.0	2.5	2.0		
Significant?	No	No	No	No		

Source: Compiled by LSA (May 2023).

Note: Source Receptor Area 22, based on a 3.5-acre operational daily area, distance of 78 feet from project boundary.

CO = carbon monoxide

PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size PM<sub>10</sub> = particulate matter less than 10 microns in size

lbs/day = pounds per day NO<sub>x</sub> = nitrogen oxides

By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions detailed in Table G assume all area, stationary, and energy source emissions would occur on site, and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related on-site vehicle and truck travel, would occur on site. Considering the total trip length included in CalEEMod, the 5 percent assumption is conservative. Table G indicates the localized operational emissions would not exceed the LSTs at nearby residences. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

As detailed in Tables F and G, the emissions levels indicate that the project would not exceed SCAQMD LSTs during project construction or operation. The project's peak operational on-site  $NO_x$ emissions are approximately 0.5 pounds per day (lbs/day). Due to the small size of the proposed project in relation to the overall Basin, the level of emissions is not sufficiently high to use a regional modeling program to correlate health effects on a Basin-wide level. On a regional scale, the quantity of emissions from the project is incrementally minor. Because the SCAQMD has not identified any other methods to quantify health impacts from small projects and due to the size of the project, it is speculative to assign any specific health effects to small project-related emissions. However, based on this localized analysis, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the project would not expose sensitive receptors to substantial levels of pollutant concentrations.

#### **Odors**

Heavy-duty equipment on the project site during construction would emit odors, primarily from equipment exhaust. However, the construction activity would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed project.

SCAQMD Rule 402 regarding nuisances states: "A person 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." The proposed uses are not anticipated to emit any objectionable odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### **Greenhouse Gas Emission Impacts**

The following sections describe the proposed project's construction- and operation-related GHG impacts and consistency with applicable GHG reduction plans.

#### Generation of Greenhouse Gas Emissions

This section describes the proposed project's construction- and operational-related GHG emissions and contribution to global climate change. SCAQMD has not addressed emission thresholds for construction in its *CEQA Air Quality Handbook*; however, SCAQMD requires quantification and disclosure. Thus, this section discusses construction emissions.

**Construction Greenhouse Gas Emissions.** Construction activities associated with the proposed project would produce combustion emissions from various sources. Construction would emit GHGs through the operation of construction equipment and from worker and builder supply vendor vehicles for the duration of the approximately 18-month construction period. The combustion of fossil-based fuels creates GHGs such as CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O. Furthermore, the fueling of heavy equipment emits CH<sub>4</sub>. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As indicated above, SCAQMD does not have an adopted threshold of significance for constructionrelated GHG emissions. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the project, defined as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier. Table H shows CO<sub>2</sub>e emission calculations for each respective construction year of the proposed project.

Construction Year	Greenhouse Gas Emissions, CO <sub>2</sub> e (metric tons per year)
2024	171.0
2025	463.0
2026	106.0
Total Project Emissions	740.0
Total Construction Emissions Amortized over 30	
years	24.7

#### **Table H: Construction Greenhouse Gas Emissions**

Source: Compiled by LSA (May 2023).

Note: Numbers may not appear to add correctly due to rounding.  $CO_2e =$  carbon dioxide equivalent

As indicated in Table H, it is estimated that the project would generate 740.0 MT CO<sub>2</sub>e during construction of the project. When amortized over the 30-year life of the project, annual emissions would be 24.7 MT  $CO_2e$ .

**Operational Greenhouse Gas Emissions.** Long-term operation of the proposed project would generate GHG emissions from area, mobile, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include project-generated vehicle trips associated with trips to the proposed project. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site and other sources. Waste source emissions generated by the proposed project include energy generated by landfilling and other methods of disposal related to transporting and managing project-generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

GHG emissions were estimated using CalEEMod. Table I shows the estimated operational GHG emissions for the proposed project. Mobile emissions are the largest source of GHG emissions for the project at approximately 48 percent of the project total. Energy sources are the next largest category at approximately 35 percent. Waste and water sources are about 15 percent and 2 percent of the total emissions, respectively.

As discussed above, a project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than the SCAQMD threshold of 3,000 MT CO<sub>2</sub>e per year. Based on the analysis results, the proposed project would result in approximately 666.0 CO<sub>2</sub>e per year. Therefore, operation of the proposed project would not generate significant GHG emissions that would have a significant effect on the environment.

	Operational Emissions (metric tons per year)						
Emission Type	CO <sub>2</sub>	CH₄	N <sub>2</sub> O	CO2e	Percentage of Total		
Mobile Sources	300.0	<0.1	<0.1	305.0	48		
Area Source	1.8	<0.1	<0.1	1.9	<1		
Energy Source	221.0	<0.1	<0.1	222.0	35		
Water Source	9.2	0.1	<0.1	13.8	2		
Waste Source	28.2	2.8	0.0	98.6	15		
<b>Total Operational Emissions</b>				641.3	100.0		
Amortized Construction Emis	sions			24.7	-		
Total Annual Emissions	666.0	-					
SCAQMD Tier 3 GHG Numer	3,000.0						
Exceedance?	No						

#### **Table I: Greenhouse Gas Emissions**

Source: LSA (May 2023). CH<sub>4</sub> = methane CO<sub>2</sub> = carbon dioxide

CO<sub>2</sub>e = carbon dioxide equivalent

GHG = greenhouse gas N<sub>2</sub>O = nitrous oxide

SCAQMD = South Coast Air Quality Management District

As stated above, the City of Corona CAP Update includes Screening Tables to help the City provide a streamlined review process for new development projects that are subject to discretionary review pursuant to CEQA. A project that accumulates at least 100 points will be consistent with the reduction quantities anticipated in the CAP Update. Therefore, consistent with *State CEQA Guidelines*, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions. Once building design specifics are known, to determine consistency with the CAP Update, the project applicant will be required to fill out the Screening Tables included in the City's CAP Update.

#### Consistency with Greenhouse Gas Reduction Plans

An evaluation of the proposed project's consistency with the City's CAP Update, the 2022 Scoping Plan, and the 2020–2045 RTP/SCS is provided below.

**City of Corona Climate Action Plan Update.** As described above, the City of Corona CAP Update<sup>17</sup> is a comprehensive planning document outlining the City's proposed approach to reduce Corona's impact on the climate by reducing GHG emissions. The consistency of the project with the goals of this CAP Update fulfills the CEQA goal of fully informing local-agency decision-makers of the environmental impact of the project under consideration at a stage early enough to ensure that GHG emissions are addressed. The CAP Update includes Screening Tables to help the City provide a streamlined review process for new development projects that are subject to discretionary review pursuant to CEQA. A project that accumulates at least 100 points will be consistent with the reduction quantities anticipated in the CAP Update. Therefore, consistent with *State CEQA Guidelines*, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions. In order to determine consistency with the CAP Update the

<sup>&</sup>lt;sup>17</sup> City of Corona. 2019. *City of Corona Climate Action Plan Update*. March. Website: 637239353962070000 (coronaca.gov) (accessed May 2023).

project applicant will be required to fill out the Screening Tables included in the City's CAP Update. Therefore, the proposed project was evaluated for consistency with the CAP Update goals. The following GHG goals and reduction strategies from the CAP Update are applicable to the proposed project:

- 2.1. Exceed Energy Efficiency Standards
- 5.1. Water Efficiency though Enhanced Implementation of Senate Bill X7-7
- 5.2. Exceed Water Efficiency Standards
- 6.1. Tree Planting for Shading and Energy Saving
- 6.2. Light Reflecting Surfaces for Energy Saving
- 7.1. Alternative Transportation Options
- 8.1. Reduce Waste to Landfills
- 9.1. Clean Energy

The proposed project would include a shuttle service to facility residents and would be required to implement transportation measures consistent with the CAP to reduce vehicle miles traveled. The proposed project would also be consistent with the CAP goal of increasing water and energy efficiency in new buildings by complying with the latest California Building Code (Title 24), including the latest CALGreen Code standards. In addition, the proposed project would comply with local and State laws regarding solar energy. Construction of the project would include a diversion of construction waste from landfills to recycling consistent with current local and State standards and CAP goals to increase diversion and reduction of waste. The proposed project would also include recreational areas and an internal roadway that would provide connectivity throughout the community consistent with the tree planting and shading goals of the CAP. As such, the proposed project would be consistent with the applicable strategies from the CAP Update. Specific project design features will be further evaluated using the Screening Table provided in the CAP Update. This will be calculated once additional building plans have been developed at the plan check state to determine whether the proposed project will achieve 100 points.

**2022 Scoping Plan.** The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, <sup>18</sup> to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the State's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

<sup>&</sup>lt;sup>18</sup> CARB. 2017. *California's 2017 Climate Change Scoping Plan*. November.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed above, the proposed project would comply with the CALGreen Code, regarding energy conservation and green building standards. Therefore, the proposed project would comply with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the project would comply with the CALGreen Code, which includes a variety of different measures, including the reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. Vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

# LSA

SCAG's Regional Transportation Plan/Sustainable Communities Strategy. SCAG's 2020–2045 RTP/SCS was adopted September 3, 2020. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high-quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The core vision in the 2020–2045 RTP/SCS is to better manage the existing transportation system through design management strategies, integrate land use decisions and technological advancements, create complete streets that are safe to all roadway users, preserve the transportation system, and expand transit and foster development in transitoriented communities. The 2020–2045 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecasted development pattern that is generally consistent with regional-level General Plan data. The forecasted development pattern, when integrated with the financially constrained transportation investments identified in the 2020–2045 RTP/SCS, would reach the regional target of reducing GHG emissions from autos and light-duty trucks by 8 percent per capita by 2020 and 19 percent by 2035 (compared to 2005 levels). The 2020–2045 RTP/SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the 2020–2045 RTP/SCS but provides incentives for consistency for governments and developers.

Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. The proposed project would not conflict with the stated goals of the RTP/SCS; therefore, the proposed project would not interfere with SCAG's ability to achieve the region's GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020 and 19 percent below 2005 per capita emissions levels by 2035, and it can be assumed that regional mobile emissions will decrease in line with the goals of the RTP/SCS. Furthermore, the proposed project is not regionally significant per *State CEQA Guidelines* Section 15206, and, as such, it would not conflict with the SCAG RTP/SCS targets as those targets were established and are applicable on a regional level.

The proposed project would include the construction of a two-story residential care facility building of approximately 109,551 gross square feet. The proposed residential care facility would consist of 107 units and will include 24-hour care assistance. Based on the nature of the proposed project, it is anticipated that implementation of the proposed project would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS. Therefore, the proposed project would not conflict with plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

#### **CONCLUSION**

Based on the analysis presented above, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed SCAQMD thresholds of significance. Compliance with SCAQMD Rule 403: Fugitive Dust would further reduce construction dust impacts. The proposed project is not expected to produce significant emissions that would affect nearby sensitive receptors. The project would also be consistent with the 2022 AQMP. The project would also not result in objectionable odors affecting a substantial number of people. GHG emissions released during construction and operation of the project are estimated to be minimal and would not be cumulatively considerable. The proposed project would generally be consistent with both the CARB Scoping Plan and the SCAG RTP/SCS.

Attachments: A: Figure 1 and Figure 2 B: CalEEMod Outputs



# **ATTACHMENT A**

**FIGURES** 



SOURCE: ESRI StreetMap, 2023

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Oakmont Senior Living Facility Site Plan

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# **ATTACHMENT B**

# **CALEEMOD OUTPUTS**
# Oakmont Senior Living Project Custom Report

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8. User Changes to Default Data

# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	Oakmont Senior Living Project
Construction Start Date	10/7/2024
Operational Year	2026
Lead Agency	
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	19.2
Location	430 W Foothill Pkwy, Corona, CA 92882, USA
County	Riverside-South Coast
City	Corona
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5468
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.12

# 1.2. Land Use Types

Land Use Subtype Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Congregate Care (Assisted Living)	107	Dwelling Unit	5.00	109,551	0.00	35,000	346	—
Parking Lot	72.0	Space	0.16	0.00	0.00	—	—	—

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads

# 2. Emissions Summary

### 2.1. Construction Emissions Compared Against Thresholds

#### ROG NOx со SO2 PM10E PM10D PM10T PM2.5E CO2T CH4 N20 CO2e Un/Mit. PM2.5D PM2.5T Daily, Summer (Max) 20.7 22.5 0.76 2.07 1.02 Unmit. 5.39 0.03 1.31 0.71 0.31 4,184 0.16 0.12 4,230 22.5 0.71 4,184 Mit. 5.39 20.7 0.03 0.76 1.31 2.07 0.31 1.02 0.16 0.12 4,230 % Reduced \_ \_\_\_\_ Daily, Winter (Max) Unmit. 5.37 40.0 29.4 0.05 1.12 7.89 9.01 1.02 3.99 5.01 7,188 0.23 0.68 7,396 Mit. 5.37 40.0 29.4 0.05 1.12 7.89 9.01 1.02 3.99 5.01 7,188 0.23 0.68 7,396 % Reduced — \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ Average \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ \_\_\_\_ Daily (Max) Unmit. 1.79 14.4 14.2 0.02 0.51 0.94 1.34 0.48 0.45 0.67 2,769 0.11 0.08 2,798 14.2 0.02 Mit. 1.79 14.4 0.51 0.94 1.34 0.48 0.45 0.67 2,769 0.11 0.08 2,798

% Reduced	_	_	_	_	_	_	_	—	_	_	—	_		—
Annual (Max)	—	—	—		—		—	—	—		—			
Unmit.	0.33	2.62	2.59	< 0.005	0.09	0.17	0.24	0.09	0.08	0.12	459	0.02	0.01	463
Mit.	0.33	2.62	2.59	< 0.005	0.09	0.17	0.24	0.09	0.08	0.12	459	0.02	0.01	463
% Reduced	—	—	—	_	—	_	—	—	—	_	—	—		—

# 2.2. Construction Emissions by Year, Unmitigated

Year	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	_	_	_			_		_	_		_		_	_
2025	5.39	20.7	22.5	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,184	0.16	0.12	4,230
2026	4.41	1.15	2.07	< 0.005	0.07	0.20	0.27	0.06	0.05	0.11	346	0.01	0.01	350
Daily - Winter (Max)	_	-							_		_			
2024	1.16	40.0	29.4	0.05	1.12	7.89	9.01	1.02	3.99	5.01	7,188	0.23	0.68	7,396
2025	5.37	20.8	20.8	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,079	0.17	0.12	4,119
2026	5.35	20.7	20.4	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,048	0.13	0.12	4,087
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—		—
2024	0.17	5.55	4.13	0.01	0.16	0.94	1.10	0.15	0.45	0.59	1,014	0.04	0.05	1,031
2025	1.79	14.4	14.2	0.02	0.51	0.83	1.34	0.48	0.20	0.67	2,769	0.11	0.08	2,798
2026	0.95	3.34	3.30	< 0.005	0.13	0.20	0.32	0.12	0.05	0.16	633	0.02	0.02	639
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	0.03	1.01	0.75	< 0.005	0.03	0.17	0.20	0.03	0.08	0.11	168	0.01	0.01	171
2025	0.33	2.62	2.59	< 0.005	0.09	0.15	0.24	0.09	0.04	0.12	459	0.02	0.01	463

2026	0.17	0.61	0.60	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	105	< 0.005	< 0.005	106
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# 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	_	_	_		_	_	_	_	—	_	—	_	_	_
2025	5.39	20.7	22.5	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,184	0.16	0.12	4,230
2026	4.41	1.15	2.07	< 0.005	0.07	0.20	0.27	0.06	0.05	0.11	346	0.01	0.01	350
Daily - Winter (Max)		_							_		_			_
2024	1.16	40.0	29.4	0.05	1.12	7.89	9.01	1.02	3.99	5.01	7,188	0.23	0.68	7,396
2025	5.37	20.8	20.8	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,079	0.17	0.12	4,119
2026	5.35	20.7	20.4	0.03	0.76	1.31	2.07	0.71	0.31	1.02	4,048	0.13	0.12	4,087
Average Daily	—	_	—	—	—	—	—	—	_	—	_	—		—
2024	0.17	5.55	4.13	0.01	0.16	0.94	1.10	0.15	0.45	0.59	1,014	0.04	0.05	1,031
2025	1.79	14.4	14.2	0.02	0.51	0.83	1.34	0.48	0.20	0.67	2,769	0.11	0.08	2,798
2026	0.95	3.34	3.30	< 0.005	0.13	0.20	0.32	0.12	0.05	0.16	633	0.02	0.02	639
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.03	1.01	0.75	< 0.005	0.03	0.17	0.20	0.03	0.08	0.11	168	0.01	0.01	171
2025	0.33	2.62	2.59	< 0.005	0.09	0.15	0.24	0.09	0.04	0.12	459	0.02	0.01	463
2026	0.17	0.61	0.60	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	105	< 0.005	< 0.005	106

# 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	_	_			_			_		_	_	_	_	_
Unmit.	4.13	1.25	13.9	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,484	18.1	0.12	3,978
Daily, Winter (Max)	_	-			_			_			—	-	_	
Unmit.	3.52	1.25	6.74	0.02	0.04	0.63	0.68	0.04	0.11	0.15	3,353	18.1	0.12	3,841
Average Daily (Max)	_	-	—	—	—	—	—	—	—	—	—	—		—
Unmit.	3.88	1.31	11.1	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,381	18.1	0.12	3,872
Annual (Max)	_	-	—		—	_	—	—			—	—	_	_
Unmit.	0.71	0.24	2.03	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	560	2.99	0.02	641

# 2.5. Operations Emissions by Sector, Unmitigated

Sector	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	-	-	_						_					—
Mobile	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943
Area	3.07	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.2	< 0.005	< 0.005	16.3
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	1,334	0.09	0.01	1,338
Water	—	_	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Waste	—	_	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Refrig.	—	_	—	—	—	—	—	—	—	—	_	—	_	1.39
Total	4.13	1.25	13.9	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,484	18.1	0.12	3,978
Daily, Winter (Max)	_	_	_	_	_		_		_					_

Mobile	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Area	2.53	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	1,334	0.09	0.01	1,338
Water	—	—	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Waste	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Total	3.52	1.25	6.74	0.02	0.04	0.63	0.68	0.04	0.11	0.15	3,353	18.1	0.12	3,841
Average Daily	—	—	—	—	—	—	—	—		—	—		—	—
Mobile	0.96	0.92	6.82	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,810	0.09	0.09	1,842
Area	2.90	0.04	4.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.1	< 0.005	< 0.005	11.2
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	1,334	0.09	0.01	1,338
Water	—	—	—	_	—	_	—	_	—	_	55.8	0.86	0.02	83.4
Waste	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Total	3.88	1.31	11.1	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,381	18.1	0.12	3,872
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305
Area	0.53	0.01	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.84	< 0.005	< 0.005	1.85
Energy	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	221	0.02	< 0.005	222
Water	—	—	—	—	—	—	—	—	—	_	9.24	0.14	< 0.005	13.8
Waste	—	—	—	—	—	—	—	—	—	_	28.2	2.82	0.00	98.6
Refrig.	—	—	—	—	—	—	—	—	—	_		—		0.23
Total	0.71	0.24	2.03	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	560	2.99	0.02	641

# 2.6. Operations Emissions by Sector, Mitigated

Sector	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)			—	—			—			_		_		_
Mobile	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943
Area	3.07	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.2	< 0.005	< 0.005	16.3
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	1,334	0.09	0.01	1,338
Water	—	—	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Waste	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Total	4.13	1.25	13.9	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,484	18.1	0.12	3,978
Daily, Winter (Max)												—		
Mobile	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Area	2.53	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Energy	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	1,334	0.09	0.01	1,338
Water	—	—	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Waste	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Total	3.52	1.25	6.74	0.02	0.04	0.63	0.68	0.04	0.11	0.15	3,353	18.1	0.12	3,841
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.96	0.92	6.82	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,810	0.09	0.09	1,842
Area	2.90	0.04	4.16	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	11.1	< 0.005	< 0.005	11.2
Energy	0.02	0.35	0.15	< 0.005	0.03	_	0.03	0.03	_	0.03	1,334	0.09	0.01	1,338
Water	_	_	_	_	_	_	_	_	-	_	55.8	0.86	0.02	83.4
Waste	_	_	_	_	_	_	_	_	_	_	170	17.0	0.00	596
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	1.39

Total	3.88	1.31	11.1	0.02	0.04	0.63	0.68	0.04	0.11	0.16	3,381	18.1	0.12	3,872
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305
Area	0.53	0.01	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.84	< 0.005	< 0.005	1.85
Energy	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	221	0.02	< 0.005	222
Water	—	—	—	—	—	—	—	—	—	—	9.24	0.14	< 0.005	13.8
Waste	—	—	—	—	—	—	—	—	—	_	28.2	2.82	0.00	98.6
Refrig.	—	—	—	—	—	—	—	—	—	_	—	—	—	0.23
Total	0.71	0.24	2.03	< 0.005	0.01	0.12	0.12	0.01	0.02	0.03	560	2.99	0.02	641

# 3. Construction Emissions Details

# 3.1. Site Preparation (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Daily, Summer (Max)														
Daily, Winter (Max)		_												
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,296	0.21	0.04	5,314
Dust From Material Movement		_				7.67	7.67		3.94	3.94				
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	_	_	_	_	_		_	_	_	_			

Off-Road Equipment	0.09	3.28	2.33	< 0.005	0.09		0.09	0.08	_	0.08	435	0.02	< 0.005	437
Dust From Material Movement	_	_				0.63	0.63		0.32	0.32	_		_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	-	-	_	_	_	_	_	_	_	_		_
Off-Road Equipment	0.02	0.60	0.42	< 0.005	0.02	_	0.02	0.02	—	0.02	72.1	< 0.005	< 0.005	72.3
Dust From Material Movement	_	_				0.11	0.11		0.06	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	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)											_		_	
Daily, Winter (Max)	_										_			_
Worker	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	231	0.01	0.01	234
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	_		—	—		—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	19.3	< 0.005	< 0.005	19.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.19	< 0.005	< 0.005	3.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.2. Site Preparation (2024) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)								—					_	
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	5,296	0.21	0.04	5,314
Dust From Material Movement						7.67	7.67		3.94	3.94			_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily		—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.09	3.28	2.33	< 0.005	0.09	—	0.09	0.08	—	0.08	435	0.02	< 0.005	437
Dust From Material Movement		_			_	0.63	0.63	_	0.32	0.32	_		_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.60	0.42	< 0.005	0.02	—	0.02	0.02	—	0.02	72.1	< 0.005	< 0.005	72.3
Dust From Material Movement						0.11	0.11	_	0.06	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	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)		—						_		_	_	_	_	_
Daily, Winter (Max)								_		—	—	_	_	_
Worker	0.08	0.10	1.10	0.00	0.00	0.23	0.23	0.00	0.05	0.05	231	0.01	0.01	234
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—			—	—	—		—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	19.3	< 0.005	< 0.005	19.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	_	_	—	—	_	_	_	—	—	—	_	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.19	< 0.005	< 0.005	3.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.3. Grading (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	_					_					_		_	
Daily, Winter (Max)	_					_					_		_	
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,969

Dust From Material Movement	_	—	—	—		2.77	2.77		1.34	1.34		_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	_	—	—	—	—	—	—	_	—		—	—	
Off-Road Equipment	0.05	1.59	1.22	< 0.005	0.05	—	0.05	0.05	_	0.05	203	0.01	< 0.005	203
Dust From Material Movement		_				0.19	0.19		0.09	0.09		_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	_	—	—	—	—	—	—	_	—	—	—	—	—
Off-Road Equipment	0.01	0.29	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	33.5	< 0.005	< 0.005	33.7
Dust From Material Movement		_				0.03	0.03		0.02	0.02		_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Daily, Summer (Max)		_							_			_	_	
Daily, Winter (Max)		-	_	_			_		-			-		
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	198	0.01	0.01	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	4.75	1.12	0.03	0.08	1.04	1.12	0.08	0.29	0.37	4,031	0.07	0.65	4,226
Average Daily	—	_	—	—	—		—		_			—	—	
Worker	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.8	< 0.005	< 0.005	14.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.33	0.08	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	276	0.01	0.04	290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.28	< 0.005	< 0.005	2.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7	< 0.005	0.01	48.0

# 3.4. Grading (2024) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	_	—	_	_	—	—	_	_	_	_	_	_	_	_
Daily, Summer (Max)			_			_		_		_				_
Daily, Winter (Max)			—					_					_	_
Off-Road Equipment	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	2,958	0.12	0.02	2,969
Dust From Material Movement			—			2.77	2.77	—	1.34	1.34			_	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	1.59	1.22	< 0.005	0.05	—	0.05	0.05	—	0.05	203	0.01	< 0.005	203
Dust From Material Movement		_	_			0.19	0.19	_	0.09	0.09				_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	—	_	_	_	_	_	_	—		_

Off-Road Equipment	0.01	0.29	0.22	< 0.005	0.01	_	0.01	0.01	-	0.01	33.5	< 0.005	< 0.005	33.7
Dust From Material Movement	_	-	-	_	_	0.03	0.03	-	0.02	0.02	-	_	-	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Daily, Summer (Max)		-	-	_	_	-	-	-	-	-	-	_	-	
Daily, Winter (Max)	_	-	-	_	_	-	-	-	-	-	-	_	-	
Worker	0.07	0.09	0.95	0.00	0.00	0.20	0.20	0.00	0.05	0.05	198	0.01	0.01	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	4.75	1.12	0.03	0.08	1.04	1.12	0.08	0.29	0.37	4,031	0.07	0.65	4,226
Average Daily		—		—	—			_	—		—	_	—	—
Worker	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.8	< 0.005	< 0.005	14.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.33	0.08	< 0.005	0.01	0.07	0.08	0.01	0.02	0.03	276	0.01	0.04	290
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.28	< 0.005	< 0.005	2.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.06	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	45.7	< 0.005	0.01	48.0

# 3.5. Building Construction (2024) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)		_	_	_	_		_	_	_					_
Daily, Winter (Max)	—	_	_	_	_	_	_	—	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	_	-	—	—	—	—	—	-	—		—		—
Off-Road Equipment	0.01	0.33	0.25	< 0.005	0.01	—	0.01	0.01	-	0.01	42.2	< 0.005	< 0.005	42.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.06	0.05	< 0.005	< 0.005	_	< 0.005	< 0.005	-	< 0.005	6.99	< 0.005	< 0.005	7.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	-	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_		_	_	_	_				
Daily, Winter (Max)		-	-	_	_		_	_	_					_
Worker	0.37	0.44	4.86	0.00	0.00	1.01	1.01	0.00	0.24	0.24	1,019	0.05	0.04	1,032
Vendor	0.01	0.42	0.13	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	355	0.01	0.05	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.2	< 0.005	< 0.005	18.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.26	< 0.005	< 0.005	6.55

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.01	< 0.005	< 0.005	3.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.04	< 0.005	< 0.005	1.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.6. Building Construction (2024) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	_	—	_	_	_	—	_	_	_	_	_	_	_	_
Daily, Summer (Max)			_					_			_		_	
Daily, Winter (Max)			—					—			—		—	
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.33	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	42.2	< 0.005	< 0.005	42.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.06	0.05	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	6.99	< 0.005	< 0.005	7.02
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Summer (Max)	—	—					_	_			_		_	—
Daily, Winter (Max)							—	—			—		_	_
Worker	0.37	0.44	4.86	0.00	0.00	1.01	1.01	0.00	0.24	0.24	1,019	0.05	0.04	1,032
Vendor	0.01	0.42	0.13	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	355	0.01	0.05	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	_	—	—	—	—	—		—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	18.2	< 0.005	< 0.005	18.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.26	< 0.005	< 0.005	6.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	_	_	_	_	—	_	_	_	—	_	—	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.01	< 0.005	< 0.005	3.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.04	< 0.005	< 0.005	1.08
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.7. Building Construction (2025) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)								—		—			_	
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69		0.69	0.64		0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)		_	_	_									_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	-	—	—	—	—	—	—	—	_	—	—	_
Off-Road Equipment	0.44	13.5	10.2	0.02	0.49	—	0.49	0.46	—	0.46	1,713	0.07	0.01	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	-	-	—	—	_	_	_	-	-	_	_	_	_
Off-Road Equipment	0.08	2.46	1.86	< 0.005	0.09	—	0.09	0.08	—	0.08	284	0.01	< 0.005	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	-	_	_				_	_			_	_
Worker	0.34	0.34	5.95	0.00	0.00	1.01	1.01	0.00	0.24	0.24	1,086	0.05	0.04	1,102
Vendor	0.01	0.38	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	350	0.01	0.05	367
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_	_	_									_	_
Worker	0.32	0.37	4.50	0.00	0.00	1.01	1.01	0.00	0.24	0.24	998	0.05	0.04	1,011
Vendor	0.01	0.40	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	350	0.01	0.05	366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	-	-	-	—	—	—	—	—	—	_	—	—	_
Worker	0.23	0.29	3.39	0.00	0.00	0.71	0.71	0.00	0.17	0.17	722	0.03	0.03	732
Vendor	0.01	0.29	0.09	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	250	0.01	0.04	262

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	120	0.01	< 0.005	121
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	41.4	< 0.005	0.01	43.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.8. Building Construction (2025) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	_	—	_	_	—	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		_			_								_	
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)													_	
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,398	0.10	0.02	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—		—		—	—
Off-Road Equipment	0.44	13.5	10.2	0.02	0.49	—	0.49	0.46	—	0.46	1,713	0.07	0.01	1,719
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	—	_		_	_	_
Off-Road Equipment	0.08	2.46	1.86	< 0.005	0.09		0.09	0.08	—	0.08	284	0.01	< 0.005	285

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	-	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		-		-		-		—	-	-	-	-	_	
Worker	0.34	0.34	5.95	0.00	0.00	1.01	1.01	0.00	0.24	0.24	1,086	0.05	0.04	1,102
Vendor	0.01	0.38	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	350	0.01	0.05	367
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_				—		_	—	-	-		_	
Worker	0.32	0.37	4.50	0.00	0.00	1.01	1.01	0.00	0.24	0.24	998	0.05	0.04	1,011
Vendor	0.01	0.40	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	350	0.01	0.05	366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	_	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.29	3.39	0.00	0.00	0.71	0.71	0.00	0.17	0.17	722	0.03	0.03	732
Vendor	0.01	0.29	0.09	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	250	0.01	0.04	262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	_	_	_	—	—	_	—	—	_	_	_	_	_
Worker	0.04	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	120	0.01	< 0.005	121
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	41.4	< 0.005	0.01	43.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.9. Building Construction (2026) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	_	_	—	_	—	—	_	_	—	_	_

Daily, Summer (Max)		_	_			_					_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	—	_	_	_	_	_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	_	—	—	—		—	—	—	—	—	—		—
Off-Road Equipment	0.09	2.66	2.02	< 0.005	0.10	_	0.10	0.09	—	0.09	338	0.01	< 0.005	339
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	0.02	0.49	0.37	< 0.005	0.02	_	0.02	0.02	—	0.02	55.9	< 0.005	< 0.005	56.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)		_	_						_		_	_		_
Daily, Winter (Max)		_	_			_			_	_	_	_	_	_
Worker	0.31	0.34	4.20	0.00	0.00	1.01	1.01	0.00	0.24	0.24	977	0.02	0.04	989
Vendor	0.01	0.38	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	345	0.01	0.05	361
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—			—	—	—		—	—		—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	139	< 0.005	0.01	141
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.5	< 0.005	0.01	50.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	23.1	< 0.005	< 0.005	23.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.03	< 0.005	< 0.005	8.42
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.10. Building Construction (2026) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	_	—	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_					—	_		_				_
Daily, Winter (Max)	_						_	_					_	_
Off-Road Equipment	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—		—
Off-Road Equipment	0.09	2.66	2.02	< 0.005	0.10	—	0.10	0.09	—	0.09	338	0.01	< 0.005	339
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_
Off-Road Equipment	0.02	0.49	0.37	< 0.005	0.02	_	0.02	0.02	_	0.02	55.9	< 0.005	< 0.005	56.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	_	_	_	_	_	—	—		_			—	_

Daily, Summer (Max)		_	_			—		_				_	_	_
Daily, Winter (Max)			—					_				—	_	
Worker	0.31	0.34	4.20	0.00	0.00	1.01	1.01	0.00	0.24	0.24	977	0.02	0.04	989
Vendor	0.01	0.38	0.12	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	345	0.01	0.05	361
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—			—		—		—
Worker	0.04	0.05	0.62	0.00	0.00	0.14	0.14	0.00	0.03	0.03	139	< 0.005	0.01	141
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	48.5	< 0.005	0.01	50.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	23.1	< 0.005	< 0.005	23.4
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.03	< 0.005	< 0.005	8.42
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.11. Paving (2026) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—			—		—					—	—	_	
Daily, Winter (Max)	_			_		_					_	—	_	
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,511	0.06	0.01	1,516

Paving	0.04	—	—	—	—	—	—	—	—	—	—	—		—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	-	-	—	—	—	—	—	—	—		
Off-Road Equipment	0.01	0.36	0.29	< 0.005	0.02	-	0.02	0.01	-	0.01	41.4	< 0.005	< 0.005	41.5
Paving	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	-	-	_	_	_
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	-	< 0.005	< 0.005	-	< 0.005	6.85	< 0.005	< 0.005	6.88
Paving	< 0.005	_	_	_	_	_	_	_	_	-	-	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	_	—	_	_	_	—	—	—	—	—	—	—	—
Daily, Summer (Max)		-	_	-	-	-			_					
Daily, Winter (Max)		_	_	_	_	_	_		_	_	_	_		
Worker	0.06	0.07	0.82	0.00	0.00	0.20	0.20	0.00	0.05	0.05	190	< 0.005	0.01	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	-	-	-	-	-	—	—	-	—	—	—	—	_
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.28	< 0.005	< 0.005	5.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.87	< 0.005	< 0.005	0.89

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.12. Paving (2026) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	_	—	_	_	_	_	_	_	—	_	_	—		_
Daily, Summer (Max)			_					_						_
Daily, Winter (Max)													_	_
Off-Road Equipment	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	1,511	0.06	0.01	1,516
Paving	0.04	—	—	—	—	—	—	—	—	—	—	—		—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—		—	—	—	—		—	—		—	—	—
Off-Road Equipment	0.01	0.36	0.29	< 0.005	0.02		0.02	0.01		0.01	41.4	< 0.005	< 0.005	41.5
Paving	< 0.005	—	—	—	—	—	—	—	—	_	_	—		—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—		—
Off-Road Equipment	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.85	< 0.005	< 0.005	6.88
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—		—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—		—

Daily, Summer (Max)	—	_	_								_		_	_
Daily, Winter (Max)			_								—		_	—
Worker	0.06	0.07	0.82	0.00	0.00	0.20	0.20	0.00	0.05	0.05	190	< 0.005	0.01	193
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.28	< 0.005	< 0.005	5.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	_	—	_	_	—	_	—	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.87	< 0.005	< 0.005	0.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.13. Architectural Coating (2025) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	_	—	_	—	—	—	—	—	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_						
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	_	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30	_	_	_	-	_	-	_	_	_	_	_		

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)		_	_		_				_					
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30	_			_									
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily		—	—	—	—	—	—	—	—	—	—	—		—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	33.7	< 0.005	< 0.005	33.8
Architectura I Coatings	1.08	_	_		_				_			_		
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	-	< 0.005	5.58	< 0.005	< 0.005	5.60
Architectura I Coatings	0.20	_	_	_	_	_	_	_	_		_	_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	-	—	—	-	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)		_	_		_				_			_		
Worker	0.07	0.07	1.19	0.00	0.00	0.20	0.20	0.00	0.05	0.05	217	0.01	0.01	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_							_					
Worker	0.06	0.07	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	200	0.01	0.01	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	51.0	< 0.005	< 0.005	51.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.45	< 0.005	< 0.005	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.14. Architectural Coating (2025) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)								_					_	—
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30							_						_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)														_
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Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30			—		_		_			_		_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—		—
Off-Road Equipment	0.01	0.27	0.24	< 0.005	0.02	—	0.02	0.02		0.02	33.7	< 0.005	< 0.005	33.8
Architectura I Coatings	1.08					—		—			—			_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	—	—	—	—	_	_	_	_	_	—	_	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.58	< 0.005	< 0.005	5.60
Architectura I Coatings	0.20			_	_					_		_		_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_		_
Daily, Summer (Max)	_			_	_	_		_		_	_	_	_	_
Worker	0.07	0.07	1.19	0.00	0.00	0.20	0.20	0.00	0.05	0.05	217	0.01	0.01	220
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_							_					
Worker	0.06	0.07	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	200	0.01	0.01	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	51.0	< 0.005	< 0.005	51.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	_	—	—	—	—	—	—	_	—	—	—	_	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.45	< 0.005	< 0.005	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.15. Architectural Coating (2026) - Unmitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)								_				—	_	_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06		0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30							_				—	_	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)							_				_	—		_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30	_				_	_				_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	—		_	—		—	_	_	—		—		—
Off-Road Equipment	0.01	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	24.3	< 0.005	< 0.005	24.4
Architectura I Coatings	0.78	_				_	_		_		_	_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	—	_	_	—	—	—	_	—	_	—	—	_	—
Off-Road Equipment	< 0.005	0.04	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	—	< 0.005	4.02	< 0.005	< 0.005	4.04
Architectura I Coatings	0.14				_		_					_		_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—		—
Daily, Summer (Max)	_	_	_		_	_	_			_	_	_	_	_
Worker	0.07	0.06	1.11	0.00	0.00	0.20	0.20	0.00	0.05	0.05	212	0.01	0.01	216
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	_	_					_							
Worker	0.06	0.07	0.84	0.00	0.00	0.20	0.20	0.00	0.05	0.05	195	< 0.005	0.01	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.0	< 0.005	< 0.005	36.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	_	—	—	—	—	—	—	—	—	—	—	_	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.96	< 0.005	< 0.005	6.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 3.16. Architectural Coating (2026) - Mitigated

Location	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)								_				—	_	_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06		0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30							_				—	_	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)							_				_	—		_
Off-Road Equipment	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	134	0.01	< 0.005	134
Architectura I Coatings	4.30	_				_	_				_	_	_	_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	_	—		_	—		_	_	_	—		—		—
Off-Road Equipment	0.01	0.20	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	24.3	< 0.005	< 0.005	24.4
Architectura I Coatings	0.78	_				_	_		_		_	_	_	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	—	_	_	—	—	—	_	—	_	—	—	_	—
Off-Road Equipment	< 0.005	0.04	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	—	< 0.005	4.02	< 0.005	< 0.005	4.04
Architectura I Coatings	0.14				_		_					_		_
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—		—
Daily, Summer (Max)	_	_	_		_	_	_			_	_	_	_	_
Worker	0.07	0.06	1.11	0.00	0.00	0.20	0.20	0.00	0.05	0.05	212	0.01	0.01	216
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	-								_					-
Worker	0.06	0.07	0.84	0.00	0.00	0.20	0.20	0.00	0.05	0.05	195	< 0.005	0.01	198
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.0	< 0.005	< 0.005	36.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	_	—	—	—	—	—	—	—	_	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.96	< 0.005	< 0.005	6.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 4. Operations Emissions Details

# 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	СО2Т	CH4	N2O	CO2e
Daily, Summer (Max)		_		_	_	_							—	
Congregate Care (Assisted Living)	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943
Daily, Winter (Max)		_							_				_	
Congregate Care (Assisted Living)	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Annual	—	_	—	—	—	—	—	—	-	—	—	—	—	—
Congregate Care (Assisted Living)	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305

# 4.1.2. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_		_		_		—	_			_	—	—	_
Congregate Care (Assisted Living)	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.04	0.85	7.73	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,908	0.08	0.09	1,943

Daily, Winter (Max)						_		_		_	_	_		_
Congregate Care (Assisted Living)	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.97	0.91	6.59	0.02	0.01	0.63	0.65	0.01	0.11	0.13	1,793	0.09	0.09	1,822
Annual	_	—	_	_	_	_	_	_	_	—	—	—	_	_
Congregate Care (Assisted Living)	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.17	1.24	< 0.005	< 0.005	0.12	0.12	< 0.005	0.02	0.02	300	0.01	0.02	305

# 4.2. Energy

## 4.2.1. Electricity Emissions By Land Use - Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)			_				—	—	_	—	—	—	—	—
Congregate Care (Assisted Living)								_			883	0.05	0.01	886
Parking Lot	—	—	_	—	_	_	_	_	_	_	8.90	< 0.005	< 0.005	8.93
Total	_	_	_	_	_	_	_	_	_	_	891	0.06	0.01	895

Daily, Winter (Max)	_	—	_	_		_	_	_	—	_	_	_	_	
Congregate Care (Assisted Living)			_					_		_	883	0.05	0.01	886
Parking Lot	—	—	—	—	—	—	—	—	—	—	8.90	< 0.005	< 0.005	8.93
Total	_	—	—	—	_	—	—	—	—	—	891	0.06	0.01	895
Annual	_	_	_	_	_	_	—	—	_	—	_	—	_	_
Congregate Care (Assisted Living)											146	0.01	< 0.005	147
Parking Lot	_	_		_	_	_	_	_	_		1.47	< 0.005	< 0.005	1.48
Total	_	_		_	_	_	_	_	_		148	0.01	< 0.005	148

## 4.2.2. Electricity Emissions By Land Use - Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)							—	_	_		_		—	_
Congregate Care (Assisted Living)								_			883	0.05	0.01	886
Parking Lot	—	—	—	—	—	—	—	—	—	—	8.90	< 0.005	< 0.005	8.93
Total	—	—	—	—	—	—	—	—	—	—	891	0.06	0.01	895
Daily, Winter (Max)								_					—	_

Congregate Care (Assisted Living)			_	—	—			—		—	883	0.05	0.01	886
Parking Lot	—	—	—	—	—	—	—	—	—	—	8.90	< 0.005	< 0.005	8.93
Total	—	—	_	—	—	—	—	—	—	—	891	0.06	0.01	895
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)			_	_						_	146	0.01	< 0.005	147
Parking Lot	_	—	_	—	—	_	_	—	_	—	1.47	< 0.005	< 0.005	1.48
Total	_	_		—	—	_	_	_	_	—	148	0.01	< 0.005	148

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)		_											—	
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03	_	0.03	0.03		0.03	442	0.04	< 0.005	443
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	442	0.04	< 0.005	443
Daily, Winter (Max)		_												
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03	442	0.04	< 0.005	443

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	442	0.04	< 0.005	443
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	< 0.005	0.06	0.03	< 0.005	0.01		0.01	0.01		0.01	73.2	0.01	< 0.005	73.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	0.06	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	73.2	0.01	< 0.005	73.4

## 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_				_	_	_	_
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03	442	0.04	< 0.005	443
Parking Lot	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	-	0.03	0.03	_	0.03	442	0.04	< 0.005	443
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Congregate Care (Assisted Living)	0.02	0.35	0.15	< 0.005	0.03		0.03	0.03		0.03	442	0.04	< 0.005	443
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.35	0.15	< 0.005	0.03	—	0.03	0.03	—	0.03	442	0.04	< 0.005	443
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Congregate Care (Assisted Living)	< 0.005	0.06	0.03	< 0.005	0.01	—	0.01	0.01		0.01	73.2	0.01	< 0.005	73.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	< 0.005	0.06	0.03	< 0.005	0.01	_	0.01	0.01	_	0.01	73.2	0.01	< 0.005	73.4

# 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Source	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)		_	_		_	_	_	_		_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.34	_	—	—	—	—	—	—	—	_	—	_	_	—
Architectura I Coatings	0.19	_		_	_	_	_		_		_		_	_
Landscape Equipment	0.54	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.2	< 0.005	< 0.005	16.3
Total	3.07	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.2	< 0.005	< 0.005	16.3
Daily, Winter (Max)		_											_	_
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.34	_	—	—	—	—	—	—	—	_	—	—	—	—
Architectura I Coatings	0.19	_											_	

Total	2.53	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.43	—		—		—				—	—	—		—
Architectura I Coatings	0.03		_			_		_		—	_	—	_	—
Landscape Equipment	0.07	0.01	0.76	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005	1.84	< 0.005	< 0.005	1.85
Total	0.53	0.01	0.76	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	1.84	< 0.005	< 0.005	1.85

# 4.3.1. Mitigated

Source	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—		—		—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	2.34	—	—	—	—	—	—	—		—	—	—	—	
Architectura I Coatings	0.19	_								_	_	_	_	_
Landscape Equipment	0.54	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005		< 0.005	16.2	< 0.005	< 0.005	16.3
Total	3.07	0.06	6.07	< 0.005	< 0.005	—	< 0.005	< 0.005	_	< 0.005	16.2	< 0.005	< 0.005	16.3
Daily, Winter (Max)											_		_	
Hearths	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00

Consumer Products	2.34	—	_	—		—	—	_		—	—	—	—	—
Architectura I Coatings	0.19		_					_			_	_	_	_
Total	2.53	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.43	—		—		—	—			—	—	—	—	—
Architectura I Coatings	0.03	_	_		_			_		_	_	-	_	-
Landscape Equipment	0.07	0.01	0.76	< 0.005	< 0.005		< 0.005	< 0.005	_	< 0.005	1.84	< 0.005	< 0.005	1.85
Total	0.53	0.01	0.76	< 0.005	< 0.005	_	< 0.005	< 0.005	—	< 0.005	1.84	< 0.005	< 0.005	1.85

# 4.4. Water Emissions by Land Use

## 4.4.2. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)														_
Congregate Care (Assisted Living)											55.8	0.86	0.02	83.4
Parking Lot	—	—	—	—	—	—	—	_	—	—	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	55.8	0.86	0.02	83.4

Daily, Winter (Max)		_	_			_	_	_		_	_	_	_	_
Congregate Care (Assisted Living)			_					_		_	55.8	0.86	0.02	83.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	_	—	_	_	_	_	_	—	_	—	55.8	0.86	0.02	83.4
Annual	_	—	_	_	_	_	—	—	_	—	_	—	—	—
Congregate Care (Assisted Living)						_					9.24	0.14	< 0.005	13.8
Parking Lot	_	—		_	_	_	_	_	_	_	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_		_		9.24	0.14	< 0.005	13.8

# 4.4.1. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)			—	_			_	_		—	_	—	—	_
Congregate Care (Assisted Living)											55.8	0.86	0.02	83.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Daily, Winter (Max)			_					—		—			_	

Congregate Care (Assisted Living)											55.8	0.86	0.02	83.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	55.8	0.86	0.02	83.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)			_	_	_	_				_	9.24	0.14	< 0.005	13.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	_	_		_	_	_	_	_	_	_	9.24	0.14	< 0.005	13.8

# 4.5. Waste Emissions by Land Use

## 4.5.2. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	_	_	—	—	_	_	—	_	—	_	—		_
Congregate Care (Assisted Living)	_			_				_			170	17.0	0.00	596
Parking Lot	—	_	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	_	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Daily, Winter (Max)		_												

Congregate Care (Assisted Living)			—	—				—	—	—	170	17.0	0.00	596
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)			_						_	_	28.2	2.82	0.00	98.6
Parking Lot	—	—	—	—	_	_	_	—	_	—	0.00	0.00	0.00	0.00
Total	_	_	_	_	_	_	_	_	_	_	28.2	2.82	0.00	98.6

## 4.5.1. Mitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)										_	_	_	—	—
Congregate Care (Assisted Living)		—					—				170	17.0	0.00	596
Parking Lot	—	_	—	—	—	—	_	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Daily, Winter (Max)		_					_						_	_
Congregate Care (Assisted Living)											170	17.0	0.00	596

Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	170	17.0	0.00	596
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)				_					_		28.2	2.82	0.00	98.6
Parking Lot	_	—	_	—	—	_	_	_	—	_	0.00	0.00	0.00	0.00
Total	_	_		—	_	_	_		_		28.2	2.82	0.00	98.6

# 4.6. Refrigerant Emissions by Land Use

#### 4.6.1. Unmitigated

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)		_									—		—	—
Congregate Care (Assisted Living)														1.39
Total	—	—	—	—	—	—	—	—	—	—	_	—	_	1.39
Daily, Winter (Max)	_	_												
Congregate Care (Assisted Living)														1.39
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	1.39
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Congregate Care (Assisted Living)		—				—	—		—	—		—		0.23
Total	—	_	_	—	—	_	_	—	_	_	—	—	—	0.23

## 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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_	_		—		_	_	_			—			
Congregate Care (Assisted Living)														1.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Daily, Winter (Max)	_	_		_							_			
Congregate Care (Assisted Living)	_	_		—		—	—	—			—			1.39
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	1.39
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congregate Care (Assisted Living)	—	_		—	—	—	—	—	—	—	—	—		0.23
Total	_	_	—	_	—	_	_	_	_	_	_	_	—	0.23

# 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	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)													_	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)										_			_	_
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	_	_	_	_	_	_	_	_	_	_	—	_	_	—
Total	_	_	_	_	_	_	_	_	_	_	_	_		_

#### 4.7.2. Mitigated

Equipment Type	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)											—	_	_	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)											_	_	_	_
Total	—	—	_	_	—	—	—	—	—	_	—	—	_	—
Annual	_	_	_	_	_	_	_	_	_	_	—	_	_	—
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.8.2. Mitigated

Equipment Type	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)														
Total	—	—	—	—	—	—	—	—	—	—	—	—	_	—
Daily, Winter (Max)	_				_									
Total	—	—	—	—	—	—	—	—	—	—	—	_	_	—
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

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

Equipment Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)											—		_	_
Total	—	_	_	_	_	—	_	—	—	_	—	_	_	_
Daily, Winter (Max)											_		_	_
Total	—	—	_	_	—	—	—	—	—	_	—	—	—	—
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.9.2. Mitigated

Equipment Type	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)											—		_	_
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)											_		_	_
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	—
Total	_	_	_	_	_	_	_	_	_	_	_	_		—

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

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_												_	
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	_	_	_		_	_	_	_					_	
Total	_	_	_	_	_	-	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	-	—	—	—	—	—	—	—	_				—
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequestere d	_	-	_	-	_	_		_	_	_	_			_
Subtotal	—	_	—	-	—	-	_	—	-	-	-	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_			
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequestere d	_	-	_	-	_	-	_	_	-	-	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequestere d	_	_	_	_	_	_	_	_	_	_	_		_	_

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	_				_							_		_
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	_
Daily, Winter (Max)	_													—
Total	_	—	—	—	—	—	—	—	—	—	—	—	—	_
Annual	_	—	—	—	—	—	—	—	—	_	—	_	—	_
Total	_	_	_	-	_	—	_	_	-	_	_	_	_	

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

Land Use	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)										—		_	_	
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)														
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Annual	_	—	—	—	—	_	_	_	—	_	_	_	_	_
Total	_	_	—	_	_	_	_	_	_	_	—	_	_	_

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Species	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)			—		_						_	_	—	—
Avoided	—	—	_	—	_	—	—	_	—	—	_	_	—	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequestere d	_	—	_	_	—	_	_	_	_	_	_	—	—	—
Subtotal	—	—	_	_	_	—	_	_	_	—	_	_	—	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	—	_	_	_	_	_	—	—	_	_
_	_	_	_	_	—	_	_	—	_	_	—	—	_	_
Daily, Winter (Max)	_													—
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequestere d	_	—	_	_	_	_	_	_	_	_	_		_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Removed	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	-	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestere d	—	—	—	—	_	—	—		—			—		—
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	10/7/2024	11/15/2024	5.00	30.0	—
Grading	Grading	11/18/2024	12/20/2024	5.00	25.0	—
Building Construction	Building Construction	12/23/2024	3/13/2026	5.00	320	—
Paving	Paving	3/16/2026	3/27/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	8/25/2025	4/3/2026	5.00	160	_

# 5.2. Off-Road Equipment

## 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41

Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
<b>Building Construction</b>	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

# 5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
			64	/ 75			

Building Construction	Tractors/Loaders/Backh	Diesel	Tier 2	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

# 5.3. Construction Vehicles

# 5.3.1. Unmitigated

Phase Name	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	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	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	_	10.2	HHDT,MHDT
Grading	Hauling	57.5	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	77.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	11.4	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_	_	HHDT
Paving	_	_	_	_
Paving	Worker	15.0	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	15.4	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	Тгір Туре	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	_	_	_	—
Site Preparation	Worker	17.5	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	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	_	10.2	HHDT,MHDT
Grading	Hauling	57.5	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	—
Building Construction	Worker	77.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	11.4	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	_		HHDT
Paving	_	_		—

Paving	Worker	15.0	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	15.4	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

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

# 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	221,841	73,947	0.00	0.00	418

# 5.6. Dust Mitigation

## 5.6.1. Construction Earthmoving Activities

riase Name (Cubic Tarus) (Natenai Exported (Cubic Tarus) Acres Graded (acres) (Matenai Demonstred (sq. n.) (Acres Paved (acres)		Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
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Site Preparation	0.00	0.00	45.0	0.00	_
Grading	11,500	0.00	25.0	0.00	_
Paving	0.00	0.00	0.00	0.00	0.16

#### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

# 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Congregate Care (Assisted Living)		0%
Parking Lot	0.16	100%

# 5.8. Construction Electricity Consumption and Emissions Factors

#### kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005
2026	0.00	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
Congregate Care (Assisted Living)	264	264	264	96,466	2,281	2,281	2,281	832,499

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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## 5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Congregate Care (Assisted Living)	264	264	264	96,466	2,281	2,281	2,281	832,499
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 5.10. Operational Area Sources

## 5.10.1. Hearths

## 5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Congregate Care (Assisted Living)	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

#### 5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
69	/ 75

Congregate Care (Assisted Living)	
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

## 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)
221840.775	73,947	0.00	0.00	418

# 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
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)
Congregate Care (Assisted Living)	605,530	532	0.0330	0.0040	1,379,531
Parking Lot	6,105	532	0.0330	0.0040	0.00

#### 5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Congregate Care (Assisted Living)	605,530	532	0.0330	0.0040	1,379,531
Parking Lot	6,105	532	0.0330	0.0040	0.00

## 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Congregate Care (Assisted Living)	4,352,094	554,950	
Parking Lot	0.00	0.00	

#### 5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)	
Congregate Care (Assisted Living)	4,352,094	554,950	
Parking Lot	0.00	0.00	

# 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)	
Congregate Care (Assisted Living)	316		
Parking Lot	0.00	_	

#### 5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)	
Congregate Care (Assisted Living)	316		
Parking Lot	0.00		

# 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Congregate Care (Assisted Living)	Household refrigerators and/or freezers	R-134a	1,430	0.22	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
Congregate Care (Assisted Living)	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Congregate Care	Household refrigerators	R-134a	1,430	0.22	0.60	0.00	1.00
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(Assisted Living)	and/or freezers						

# 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

## 5.15.2. Mitigated

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

## 5.16.1. Emergency Generators and Fire Pumps

	Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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## 5.16.2. Process Boilers

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

Equipment Type	Fuel Туре
_	

## 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
5 18 1 2 Mitigated			

#### 5.18.1.2. Mitigated

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

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## 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
5.18.2. Sequestration			
5.18.2.1. Unmitigated			
Тгее Туре	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

## 5.18.2.2. Mitigated

# 8. User Changes to Default Data

	Screen Ju	ustification
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Land Use	Proposed project is at a 5.16 acre site and would consist of a 109,551 sf senior residential facility of approximately 107 units and 72 parking spaces. Project would include 35,000 sf of recreational open space.
Construction: Construction Phases	Construction would start in the fourth quarter of 2024 and occur for approximately 18 months. Assume overlap between building construction and architectural coating.
Construction: Off-Road Equipment	Default construction equipment with tier 2 engine
Operations: Vehicle Data	Based on 264 average daily trips. Trip rates consistent with the TIA
Operations: Hearths	Proposed project would not include fireplaces or woodburning