APPENDIX A:
AIR QUALITY AND GREENHOUSE GAS IMPACT ANALYSIS

AIR QUALITY AND GREENHOUSE GAS IMPACT ANALYSIS

Sierra West Assisted Living and Memory Care Project
Santa Clarita, CA

Envicom Project #19-105-101

Prepared for:

NORRIS CONSTRUCTION CO.
P.O. Box 55786
Valencia, CA 91385
Attn: Norris Whitmore

Prepared by:

ENVICOM CORPORATION
4165 E. Thousand Oaks Blvd., Suite 290
Westlake Village, CA 91362

February 11, 2019

SECTION

TABLES

FIGURE

APPENDIX

1.0 INTRODUCTION

This report is an analysis of the potential air quality and greenhouse gas (GHG) emissions impacts of the proposed Sierra West Assisted Living and Memory Care Project in the City of Santa Clarita pursuant to the California Environmental Quality Act (CEQA).

2.0 ATMOSPHERIC SETTING

The City of Santa Clarita is located within the South Coast Air Basin (SCAB, or air basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and is bounded by the Pacific Ocean and Ventura County to the west, the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and San Diego County to the south. In general, the SCAB encompasses a metropolitan area with a high level of human activity. The climate characteristics of the SCAB, such as low temperature inversions, light winds, shallow vertical mixing, and extensive sunlight, in combination with topographical features, such as the adjacent mountain ranges, inhibit the vertical and horizontal dispersion of air pollutants, which can result in degraded air quality within the air basin.

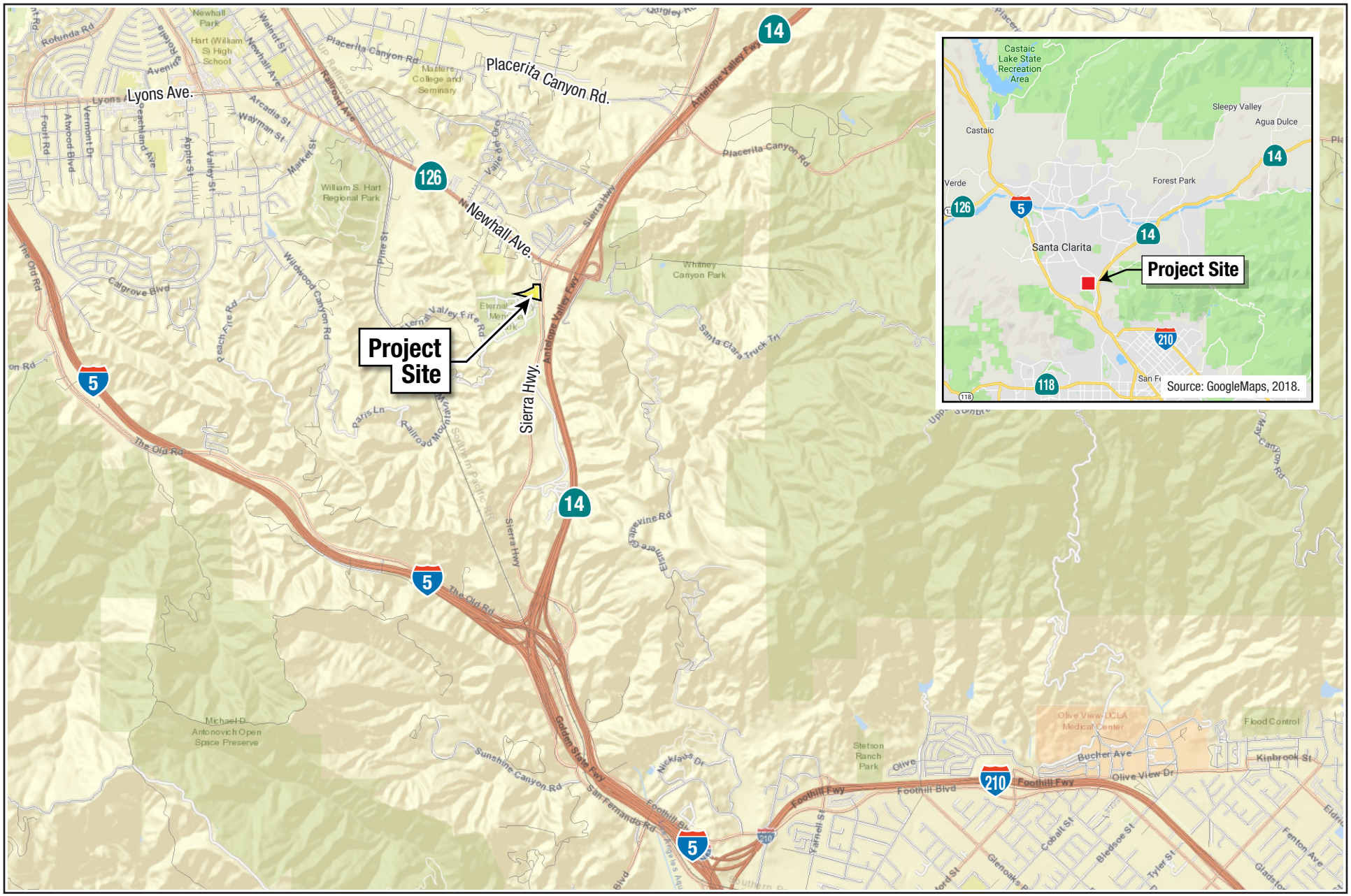
3.0 PROPOSED DEVELOPMENT

The proposed project consists two parcels, Assessor Parcel APNs 2827-005-042 and -043, that comprise approximately four (4) acres located on the west side of Sierra Highway, south of San Fernando Road/Newhall Avenue and west of the I-14 Freeway (project site, or subject property) in the City of Santa Clarita, as shown in **Figure 1, Location Map**. The site is currently undeveloped and zoned "Mixed Use – Corridor" (MX-C).

The proposed project would involve construction/operation of an 83-unit assisted living and memory care facility and associated parking within approximately 1.1 acre of the project site. The project would avoid the remainder of the subject property, which would remain undeveloped. Of the 83 units, 29 would be studio sized units for memory-care patients and the remaining 54 units would be for assisted living residents (comprised of 51 one-bedroom units and 3 two-bedroom units). A total of 73 parking spaces would be provided, primarily within a parking garage that would occupy the structure's basement level and first level.

The project would be constructed as one building, containing a basement, with 5 levels above. The basement level would be fully below grade, and Level 1 would be at grade at the entry to the facility, but below grade on the west, against the hillside. The project will be landscaped and include a passive activity area on the west with planters and seat walls and a City-required equestrian path through the property in front of the proposed building, on the east, parallel to Sierra Highway. Truck loading space and fire turn-around access will be provided on the south side of the building.

The basement level would contain employee parking and guest parking as well as laundry and maintenance facilities. Level 1 would include the lobby, facility office space, building amenities (e.g., salon, gym) and building facilities rooms (e.g., equipment and electrical) and parking. Parking on Level 1 would include some parking spaces including spaces designed for Americans with Disability Act (ADA) compliance, clean air/vanpool/electric vehicles, and bicycles. Level 2 would contain 29 memory care studio units (which consist of a bedroom and accessible bathroom), dining rooms, pharmacy, doctor/nurse office, the secure memory care courtyard, a sitting area and lounge. One- and two-bedroom assisted living units would be provided on Levels 3 through 5, with the first two having 19 units each and the highest floor having 16 units (for a total of 54).



Source: ESRI, World Street Map, 2016.

envicom

Location Map

FEET 0 2,000 4,000

FIGURE 1

The disturbance footprint is expected to be approximately 48,064 sf (approximately 1.1 acres) Development of the project would require cut and fill, and a net export of an estimated at 8,500 cubic yards of earth. The anticipated start date for construction is estimated at September 1, 2020, with project completion by September 1, 2022.

4.0 AIR QUALITY SETTING

Ambient Air Quality Standards

National and State ambient air quality standards (AAQS),[1] shown in **Table 1, Ambient Air Quality Standards**, are the air quality levels that are considered safe, with an adequate margin of safety, to protect the public health and welfare of "sensitive receptors," which include the elderly, young children, the acutely and chronically ill (e.g., those with cardio-respiratory disease, including asthma), and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (O_3), the primary ingredient in photochemical smog, may lead to adverse respiratory health, even at concentrations close to the ambient standard. Sources and health effects of various air pollutants are shown in **Table 2, Health Effects of Major Criteria Pollutants.**

Baseline Air Quality

Existing levels of ambient air quality and historical trends and projections in the project area are documented from measurements made by the SCAQMD, which is the agency that is responsible for regulating stationary sources of emissions in the air basin. The nearest SCAQMD air monitoring station to the project site is the Santa Clarita Valley air monitoring station (Station 90), located at 22224 Placerita Canyon Road,[2] approximately 1.8 miles from the project site. Therefore, monitoring data recorded at that station for regional air pollutants, such as O_3, carbon monoxide (CO), nitrogen oxides (NOx), and 10-micron diameter or less particulate matter (PM-10 and PM-2.5) are most representative of the air quality in the project area. The air basin is a nonattainment area for ozone.[3] **Table 3, Project Area Air Quality Monitoring Summary 2013-2017**, provides data from this monitoring station for the previous five years (2013-2017) for which this data is available from the SCAQMD website.[4] The air quality data and trends in the project vicinity, as documented in Table 3, are summarized below:

1. From 2013 -2017, O_3 levels have exceeded the 1-hour State standard, the Federal 8-hour standard, and the 8-hour State standard on multiple occasions. In 2017, the maximum recorded 1-hour and 8-hour concentrations were 0.151 and 0.128 parts per million (ppm), respectively, compared to the State standards for 1-hour and 8-hour concentrations of 0.09 ppm and 0.07 ppm, respectively.
2. PM-10 levels exceeded the State 24-hour standard approximately on three of the days monitored from 2013-2017. The National 24-hour PM-10 standard was not exceeded in the same period.
3. CO and NOx levels have not exceeded National or State standards in the previous five years of monitoring data (2013-2017).

[1] California Air Resources Board. California and National Ambient Air Quality Standards. Available at: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf?_ga=2.111850244.1417595818.1550763932-1724706578.1550763932. Accessed on October 23, 2019.
[2] South Coast Air Quality Management District, Monitoring Network Plan, Available at http://www.aqmd.gov/home/air-quality/clean-air-plans/monitoring-network-plan. Accessed February 10, 2020.
[3] South Coast Air Quality Management District, Final 2016 Air Quality Management Plan, March 2017.
[4] South Coast Air Quality Management District, Historical Data By Year, Available at http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year. Accessed February 10, 2020.

Table 1
Ambient Air Quality Standards

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			
See footnotes on next page ...						

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Examples of Sources	Health Effects
Particulate Matter (PM-2.5, PM-10)	• Cars and trucks (especially diesels) • Fireplaces, woodstoves • Windblown dust from roadways, agriculture and construction	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death
Ozone (O_3)	• Precursor sources*: motor vehicles, industrial emissions, and consumer products	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation
Carbon Monoxide (CO)	• Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves	• Chest pain in heart patients ** • Headaches, nausea ** • Reduced mental alertness ** • Death at very high levels **
Nitrogen Dioxide (NO_2)	• See carbon monoxide sources	• Increased response to allergens

Source: California Air Resources Board, ARB Fact Sheet: Air Pollution and Health, webpage (reviewed December 2, 2009), accessed at https://www.arb.ca.gov/research/health/fs/fs1/fs1.htm October 23, 2019.
* Ozone is not generated directly by these sources. Rather, chemicals emitted by these precursor sources react with sunlight to form ozone in the atmosphere.
** Health effects from CO exposures occur at levels considerably higher than ambient.

Table 3
Project Area Air Quality Monitoring Summary 2014-2018

Pollutant/Standard*	2014	2015	2016	2017	2018
Ozone					
Number of Days Standards Exceeded					
1-Hour > 0.09 ppm (S)	32	23	29	45	21
8-Hour > 0.07 ppm (S)	65	55	59	73	52
8- Hour > 0.075 ppm (F)	45	37	35	53	36
Maximum Observed Concentration					
Max. 1-Hour Conc. (ppm)	0.137	0.126	0.130	0.151	0.132
Max. 8-Hour Conc. (ppm)	0.110	0.108	0.115	0.128	0.106
Carbon Monoxide					
Number of Days Standards Exceeded					
8-Hour > 9.0 ppm (S, F)	0	0	0	0	0
Maximum Observed Concentration					
Max 8-Hour Conc. (ppm)	1.2	0.9	1.1	0.8	0.8
Nitrogen Dioxide					
Number of Days Standards Exceeded					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Maximum Observed Concentration					
Max. 1-Hour Conc. (ppm)	0.058	0.065	0.046	0.058	0.059

Pollutant/Standard*	2014	2015	2016	2017	2018
Inhalable Particulates (PM-10)					
Number of Days Standards Exceeded/Days Monitored					
24-Hour > 50 μg/m^3 (S)	0/59	0/52	1/60	2/54	0/54
24-Hour > 150 μg/m^3 (F)	0/59	0/52	0/60	0/54	0/54
Maximum Observed Concentration					
Max. 24-Hr. Conc. (μg/m^3)	47	41	96	66	49

Source: SCAQMD Santa Clarita Monitoring Station Reports, available at http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year.
* Annual monitoring data provided by SCAQMD for the Santa Clarita Valley Monitoring Station does not include data for Ultra-Fine Particulates (PM-2.5).
Notes: S = State; F = Federal; μg/m^3 = micrograms per cubic meter of air

Air Quality Planning

In the air basin, the agencies designated to develop the regional Air Quality Management Plan (AQMP) are the SCAQMD and the Southern California Association of Governments (SCAG). The 2016 Air Quality Management Plan (AQMP) is a regional blueprint for achieving air quality standards and healthful air, and it represents a comprehensive analysis of emissions, meteorology, atmospheric chemistry, regional growth projections, and the impact of existing control measures. According to the AQMP, the principal contributor to air quality challenges in the air basin is mobile source emissions.

Primary Pollutants

Primary pollutants are those that are emitted in their already unhealthful form. CO is an example of such a pollutant, which can have effects at a very localized level, near an individual source of emissions or a collection of sources, such as a crowded intersection or parking lot. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the SCAB for PM-10, SCAQMD Rule 403 requires construction projects to implement an aggressive dust control program.

Secondary Pollutants

Secondary pollutants are those that transform over time from more benign components directly emitted from a source(s) to a more unhealthful contaminant. O_3 is an example of a secondary pollutant, which is created through chemical reactions involving primary precursors (reactive organic gases, or ROG, and NOx) and sunlight.

Emissions Forecasts

The most current regional emissions forecast[5] for O_3 precursors (ROG and NOx) and for CO and PM are shown in **Table 4, South Coast Air Basin Emissions Forecasts (Emissions in tons/day)**. Substantial reductions in emissions of ROG, NOx, and CO are forecast to continue throughout the next several decades. Emissions of PM-10 and PM-2.5 are forecast to slightly increase unless new particulate control programs are implemented.

[5] California Air Resources Board, Almanac 2013 (Chapter 4: Trends and Forecasts, Available at https://www.arb.ca.gov/aqd/almanac/almanac.htm, Accessed on February 21, 2019.

Table 4
South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2015[a]	2020[b]	2025[b]	2030[b]
Nitrogen Oxide (NOx)	357	289	266	257
Volatile Organic Compounds (VOCs)	400	393	393	391
PM-10	161	165	170	172
PM-2.5	67	68	70	71

Source: California Air Resources Board, 2013 Almanac of Air Quality.
[a] 2015 Base Year.
[b] With current emissions reduction programs and adopted growth forecasts.

5.0 AIR QUALITY IMPACTS

Significance Criteria

State CEQA Guidelines

Air quality impacts of a project are considered significant if they cause clean air standards to be violated where they are currently met, or if they substantially contribute to an existing violation of standards. Substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, that are generated by a project, would also be considered significant impacts.

As set forth in Appendix G, Environmental Checklist, of the State CEQA Guidelines, a project could have a potentially significant impact if it would:

a. Conflict with or obstruct implementation of the applicable air quality plan;
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard;
c. Expose sensitive receptors to substantial pollutant concentrations; and/or
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

SCAQMD Emissions Thresholds

While conformity with adopted plans, forecasts, and programs relative to population, housing, employment, and land use designations could indicate conformance with the current AQMP, the air quality impact significance for the proposed project has been analyzed on a project-specific basis to determine consistency with SCAQMD's project impact evaluation thresholds. As the amount of a secondary pollutant that may result from a project cannot be quantified by direct measurement of its emissions from a source, the SCAQMD has designated significant emissions levels of precursor components as surrogates for evaluating whether a project's emissions could result in significant regional air quality impacts associated with secondary pollutants. Projects with daily emissions that exceed any of the emission thresholds shown in **Table 5, SCAQMD CEQA Daily Emissions Thresholds**, are recommended by the SCAQMD to be considered significant under CEQA.

Table 5
SCAQMD CEQA Daily Emissions Thresholds

Pollutant	Construction	Operations
ROG	75	55
NO_X	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SO_X	150	150
Source: SCAQMD CEQA Air Quality Significance Thresholds. Revision March 2015.		

Existing Land Use Emissions

The project site is currently undeveloped, and as such, existing emissions of air pollutants from the site is assumed to be zero.

Sensitive Receptors

Air quality impacts are analyzed relative to those persons with the greatest sensitivity to air pollution exposure. Such persons are called "sensitive receptors." Sensitive receptors include the elderly, young children, the acutely and chronically ill (e.g., those with cardio-respiratory disease, including asthma), and persons engaged in strenuous work or exercise. Adjacent and nearby land uses to the project site include a memorial park (cemetery) to the south and west, a park-and-ride lot and a storage yard for trucks and equipment to the north, one residence approximately 300 feet northwest of the project site, and the Sierra Highway east of the site. The SR-14 freeway is located approximately 800 feet east of the site. The nearest existing structure to the project site is a commercial use structure, located adjacent to the northern boundary of the project site property. The nearest sensitive receptor to the project site is the residential use located to the northwest. However, this evaluation will conservatively consider potential local emissions impacts based on the distance to the adjacent commercial use structure.

Construction Activity Impacts

Dust is typically the primary concern during the construction of projects that would involve land clearing and grading. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Emission rates vary as a function of many parameters (including soil silt, soil moisture, wind speed, area disturbed, number of vehicles, and depth of disturbance or excavation).

The California Emissions Estimator Model® (CalEEMod) is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as from energy use, solid waste disposal, vegetation planting and/or removal, and water use. The model was developed for the California Air Pollution Officers Association (CAPCOA) in collaboration with the California Air Districts.

The proposed project's estimated construction emissions were modeled using CalEEMod Version 2016.3.2 to identify maximum daily emissions for each pollutant during project construction. The output reports from CalEEMod are included as **Appendix A** to this report. Construction emissions were modeled based

on the size of the project development footprint, the project's proposed floor area and parking facilities, and projected duration of construction activities. A conceptual construction equipment fleet list and approximate duration of each construction phase is shown in **Table 6, Conceptual Construction Equipment Fleet**.

Table 6
Conceptual Construction Equipment Fleet

Construction Phase	Duration (Working days)	Equipment Type (Quantity)
Site Preparation (Grubbing and Stump removal)	9	1 Rubber-tired Dozer
		1 Rubber-tired Loader
		1 Tractor/Loader/Backhoe
Grading (including soil import)	30	1 Grader
		1 Rubber-tired Dozer
		1 Rubber-tired Loader
		1 Excavator
		1 Tractor/Loader/Backhoe
Construction	400	1 Crane
		1 Forklift
		1 Generator Set
		1 Tractor/Loader/Backhoe
		3 Welders
Paving	20	1 Cement/mortar mixer
		1 Paver
		1 Paving equipment
		1 Roller
		1 Tractor/Loader/Backhoe
Architectural Coating (painting)	20	1 Air Compressor
Source: Email communication from Norris Whitmore to Envicom Corporation, October 23, 2019.		

The project's estimated maximum daily construction emissions, as calculated by CalEEMod, are listed in **Table 7, Maximum Daily Construction Emissions (pounds/day)**. All construction grading projects in the SCAB must comply with the requirements of SCAQMD Rule 403, Fugitive Dust, which requires the implementation of Best Available Control Measures (BACM) for all fugitive dust sources. SCAQMD Rule 403, Control Measure 08-2 states that during earth moving activities, projects are required to "Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction." Therefore, pursuant to SCAQMD Rule 403, the project would be required to implement adequate watering of exposed surfaces during grading. As seen in Table 7, peak daily construction activity emissions of criteria air pollutants are estimated to be far below the SCAQMD thresholds of significance. Therefore, construction period air quality impacts of the project would be less than significant.

Table 7
Maximum Daily Construction Emissions (pounds/day)

	ROG	NO_X	CO	SO_2	PM-10	PM-2.5
Maximum Daily Construction Emissions	20.0	31.7	16.3	0.1	6.3	3.6
SCAQMD Thresholds	75	100	550	150	150	55
Significant Impact? Yes/No	No	No	No	No	No	No
Source: CalEEMod output, October 28, 2019. Estimates based on application of water for dust suppression twice daily for compliance with SCAQMD Rule 403– Fugitive Dust requirements.						

Localized Significance Thresholds Analysis

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to the SCAQMD Governing Board's Environmental Justice Enhancement Initiative 1-4, and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005. LSTs are only applicable to the following criteria pollutants: NO_X, CO, PM-10, and PM-2.5. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard, and they are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. For this analysis, the appropriate SRA is the Santa Clarita Valley.

The use of an LST analysis for a project is optional, to be implemented at the discretion of local public agencies acting as a lead agency pursuant to the CEQA.[6] For the proposed project, the primary source of possible LST impact would be construction activity, based on the maximum onsite daily emissions estimated by CalEEMod. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours, such as a residence, hospital, or convalescent facility.

SCAQMD's LST screening tables are available for 25, 50, 100, 200 and 500-meter source-receptor distances. The nearest sensitive receptor to the project site is a residential use, located approximately 100 meters to the northwest. However, this evaluation will conservatively consider potential local emissions impacts based on the most stringent LST screening table source-receptor distance of 25 meters to include a commercial use located adjacent to the northern boundary of the Project site.[7]

LSTs are also dependent on site size. LST screening tables are available for 1, 2 and 5-acre sites. As the Project's grading disturbance area would be confined to approximately 1.1 acres of the subject property, the applicable LST screening levels for this project would be for a 1-acre site. This evaluation is based on estimated onsite daily construction emissions for the phase and year representing the highest daily emissions. Daily averages would be lower than the reported maximum amounts. **Table 8, Local Significance Thresholds (LST) and Peak Daily Onsite Emissions (pounds/day)**, shows the relevant thresholds and the estimated peak daily onsite emissions during the construction phases that would generate the highest level of onsite emissions for each pollutant evaluated for LST impacts.[8] As previously described, the project would be required to implement adequate watering of exposed surfaces during grading to reduce dust emissions to comply with SCAQMD Rule 403, Fugitive Dust. As seen in Table 8, the peak onsite emissions during construction would not exceed the applicable SCAQMD LSTs at any existing structures in the project vicinity, and as such, potential LST impacts would be less than significant. The LST thresholds for sensitive uses at 100 meters distance, which is approximately the distance to the nearest known residential use, are much higher, and therefore, the project's emissions of these pollutants would be even farther below the LST levels that would be applicable at that distance.

---

6 South Coast Air Quality Management District, Localized Significance Thresholds, Accessed on November 13, 2019 at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

7 The closest receptor distance on the mass rate LST look-up tables is 25 meters. It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, Revised July 2008. Accessed at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2 on October 29, 2019.

8 Offsite construction emissions, such as export hauling, are not considered in local significance evaluations.

Table 8
Local Significance Thresholds (LST)
and Peak Daily Onsite Emissions (pounds/day)

LST 1.0 ac/25 m Santa Clarita Valley	NO_X	CO	PM-10	PM-2.5
LST Threshold	114	590	4	3
Peak Onsite Daily Emissions	22.8	11.4	3.4	2.2
Significant Impact? Yes/No	No	No	No	No
Source: CalEEMod output, October 28, 2019.				

Operational Impacts

During operations, the proposed land uses would result in emissions of criteria pollutants from area sources (i.e. consumer products, architectural coatings, and landscaping equipment), energy sources (electricity and natural gas usage), and mobile sources (vehicle use). Potential types of pollutants included in the modeling of area, Energy and Mobile emissions sources are those listed in Table 5: ROG, NO_X, CO, SO_X, PM-10, and PM-2.5. The SCAQMD thresholds for air quality impacts from operations are shown in Table 4. Operations of the proposed development would not be anticipated to exceed SCAQMD significance thresholds for criteria pollutants, as shown in **Table 9, Maximum Daily Operations Emissions (pounds/day)**. As seen in Table 9, the project's total operational emissions would be far below SCAQMD thresholds. Therefore, operational impacts of the project would be less than significant.

Table 9
Maximum Daily Operations Emissions (pounds/day)

Emissions Sources	ROG	NO_X	CO	SO_2	PM-10	PM-2.5
Area	1.55	0.08	6.86	<0.01	0.04	0.04
Energy	0.03	0.28	0.12	<0.01	0.02	0.02
Mobile	0.36	1.96	4.69	0.02	1.58	0.43
Total	**1.94**	**2.32**	**11.67**	**0.02**	**1.64**	**0.49**
SCAQMD Thresholds	55	55	550	150	150	55
Significant Impact? Y/N	No	No	No	No	No	No
Source: CalEEMod output, October 28, 2019.						

Toxic Air Contaminants

Exhaust particulates emitted from diesel powered equipment contains carcinogenic compounds, or toxic air contaminants (TACs). As residential projects and small scale general commercial uses do not generate a substantial quantity of diesel truck trips during operations, any measurable diesel TAC emissions from the project would occur for only a brief period during construction activities that would require onsite use of heavy-duty equipment. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe rather than a relatively brief construction period, due to the lack of health risk associated with such a brief exposure. As such, potential impacts of the project due to emissions of toxic air contaminants would be less than significant.

Odor Impacts

As stated above, a significant impact may occur if a project would result in other emissions, such as those leading to odors that would adversely affect a substantial number of people. However, objectionable odors are typically associated with manufacturing, industrial, or sewage treatment processes, and typically are not associated with residential development and assisted living uses. The proposed assisted living and memory care facility would not include any activities, equipment, or industrial processes that would generate odors, either inside or outside of the facility. The facility will include five receptacles for trash, five receptacles for recyclables, and three yard bins for green waste, which would all be emptied weekly by Waste Management. Nevertheless, the SCAQMD's rules for odor compliance are mandated under the California Health and Safety Code, Section 41700, and they are also addressed in SCAQMD Rule 402. This rule on Public Nuisance 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 provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

During construction and operation of the project, trash receptacles would be provided and covered and properly maintained in order to control odors, as required by law. For operations, enclosed trash storage areas are proposed for disposal and recycling materials within the site. Therefore, odor impacts of the project during construction and operation would be less than significant.

6.0 GREENHOUSE GAS EMISSIONS (GHG) IMPACT

Greenhouse gases (GHGs) emitted by human activity are implicated in global climate change. These GHGs contribute to an increase in the temperature of the earth's atmosphere by preventing long wavelength heat radiation in some parts of the infrared spectrum from leaving the atmosphere. According to the California Air Resources Board (CARB), "In California, as in the rest of the world, climate change is contributing to an escalation of serious problems, including raging wildfires, coastal erosion, disruption of water supply, threats to agriculture, spread of insect-borne diseases, and continuing health threats from air pollution". For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs as including CO_2, CO, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Carbon dioxide is the primary GHG emitted in California, accounting for 84 percent of total GHG emissions in 2015.[9] Because the warming potential of the identified GHGs differ, GHG emissions are typically expressed in terms of CO_2 equivalents (CO_2e), providing a common expression for the combined volume and warming potential of the GHGs generated by a particular emitter. The total GHG emissions from individual sources are generally reported in metric tons (MT) and are expressed as MT of CO_2 ($MTCO_2e$).

Fossil fuel combustion in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. The transportation sector, primarily on-road travel, is the single largest source of CO_2 emissions in California. Additionally, about 50 percent of the industrial source emissions of CO_2 are from the refinery and oil and gas sectors. When the industrial source emissions from the oil and gas sectors are attributed to the transportation sector, the emissions associated with transportation amount to approximately half of Statewide GHG emissions.[10] According to CARB, the sector with the largest share of GHG emissions in the State in 2017 was the transportation sector, which accounted for 41 percent GHG emissions

[9] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.
[10] California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017.

in California.[11] The remainder of 2017 GHG emissions contributions by sector consisted of: 24 percent Industrial; 9 percent In-State Electricity; 6 percent Imported Electricity; 8 percent Agriculture; 7 percent Residential; and 5 percent Commercial.[12]

The Global Warming Solutions Act of 2006 (Assembly Bill, or AB, 32) required that the California Air Resources Board (ARB) determine the Statewide 1990 GHG emission level and approve a Statewide GHG emissions limit, equal to the 1990 level, to be achieved by 2020. As reported in the 2017 Climate Change Scoping Plan, California is on track to exceed its 2020 GHG reduction target. Executive Order B-30-15 and Senate Bill (SB) 32 extended the goals of AB 32 and set a 2030 goal of reducing emissions by 40 percent from 2020 levels.

Thresholds of Significance

Based on the CEQA Appendix G guidelines, a project would have a potentially significant GHG impact if it would:

- Generate GHG emissions, directly or indirectly, that may have a significant impact on the environment, or
- Conflict with an applicable plan, policy or regulation adopted to reduce GHG emissions.

In determining the significance of impacts from GHG emissions, Section 15064.4 of CEQA specifies that a lead agency has the discretion to determine whether to quantify project-related GHG emissions or to rely on a qualitative analysis or performance based standards. Section 15064.4 also states that a lead agency should consider 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.

This analysis relies on a combination of the quantification of GHG emissions method, which were estimated for the project using CalEEMod, with City of Santa Clarita Climate Action Plan (CAP) compliance, to evaluate the project's GHG impacts. The City of Santa Clarita General Plan Conservation and Open Space Element provides goals and policies for reducing GHG emissions, which included a policy to initiate preparation of the CAP, as well as encouraging energy reducing techniques.

Construction Activity GHG Emissions

As shown in the CalEEMod output for the proposed project in Appendix A, during project construction, the CalEEMod computer model estimates that the construction activities would generate a total of 374 $MTCO_2e$ emissions. The SCAQMD's GHG emissions evaluation guidance is to amortize construction emissions over a 30-year lifetime, which results in a project amortized annual emissions of approximately 12.5 $MTCO_2e$ emissions.

Project Operational GHG Emissions

Based on the CalEEMod output files provided in Appendix A of this report, the project's annual operational GHG emissions from a combination of area sources, energy use, mobile, water use, and waste disposal would be 612.4 $MTCO_2e$, as shown in **Table 10, Annual Greenhouse Gas Emissions**. No building energy efficiency or renewable energy features were assumed in the model. Therefore, project emissions shown in Table 10 related to such features conservatively reflect standard default rates of the model only. With the

[11] California Air Resources Board, GHG Emission Inventory Graphs, Accessed at https://ww2.arb.ca.gov/ghg-inventory-graphs on February 10, 2020.
[12] California Air Resources Board, GHG Emission Inventory Graphs, Accessed at https://ww2.arb.ca.gov/ghg-inventory-graphs on February 10, 2020.

addition of the amortized construction GHG emissions discussed above, the emissions model estimates the project would result in annual emissions of approximately 624.9 $MTCO_2e$.

Table 10
Annual Greenhouse Gas Emissions

Generation Source	$MTCO_2e$/year [a]
Project Emissions	
Area Sources	1.4
Energy Utilization	222.0
Mobile Source	308.9
Solid Waste Generation	38.1
Water Consumption	42.0
Construction (Amortized)	12.5
Total Project Operational Emissions [a]	**624.9**

Source: CalEEMod output October 28, 2019. (Appendix A)
[a] No building energy efficiency or renewable energy features were assumed in the model. The project emissions related to such features reflect standard default rates of the model only.

Plan Consistency

According to the City of Santa Clarita CAP,[13] projects that are consistent with the City's General Plan and Zoning ordinance will by association be consistent with the CAP. The proposed assisted living and memory care facility would be consistent with the City's General Plan and zoning for the site with approval of a minor use permit. Additionally, the project would be required to be designed in accordance with applicable requirements of the California Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6), the applicable mandatory requirements of the California Green Building Standards Code (California Code of Regulations Title 24, Part 11). Energy efficiency requirements reduce energy use, and therefore reduce a project's potential energy source GHG emissions. Project features that would exceed Title 24 requirements to improve energy efficiency include:

- Cool roof system.
- Dual glaze glass and windows.
- R38 insulation in roof attic.
- R19 insulation in all exterior walls.

The project also proposes installation of roof top solar power panels targeted to offset approximately 20 percent of the project's total electricity demand to further reduce potential energy source GHG emissions. The project would also reserve eight clean air vehicle priority parking spaces for electric vehicle (EV) or vanpool use, including future EV charging stations, 90 percent of which would be for employee yes, and 10 percent of which would be for visitor use, as well as bicycle parking racks for employees or visitors, to encourage use of alternatives to fossil-fueled vehicles and/or vanpooling, which would reduce potential mobile source (vehicle) GHG emissions. Additionally, the project would provide a shuttle bus/van and car service for use by residents, and would provide onsite services that include in-house nurse, office available for doctor visits, gym, hair salon, and other amenities that would reduce the need for travel from the site. **Table 11, General Plan Consistency**, summarizes how the project would be consistent with the General Plan objectives and policies associated with GHG emissions reductions from private development projects.

[13] City of Santa Clarita Community Development Department, City of Santa Clarita Climate Action Plan Final Report, August 2012. Page 53.

Table 11
General Plan Consistency

General Plan Goals and Policies	Project Consistency
Objective CO 8.3: Encourage the following green building and sustainable development practices on private development projects, to the extent reasonable and feasible.	
Policy CO 8.3.4: Encourage new residential development to include on-site solar photovoltaic systems, or pre-wiring, in at least 50% of the residential units, in concert with other significant energy conservation efforts.	The project will install rooftop solar panels to supplement electricity supplies from utilities.
Policy CO 8.3.6: Require new development to use passive solar heating and cooling techniques in building design and construction, which may include but are not be limited to building orientation, clerestory windows, skylights, placement and type of windows, overhangs to shade doors and windows, and use of light colored roofs, shade trees, and paving materials.	As shown on the site plan, the project would use light colored finishing for surfaces. In addition, the underground location of the parking structure would insulate this space from outdoor temperatures.
Policy CO 8.3.7: Encourage the use of trees and landscaping to reduce heating and cooling energy loads, through shading of buildings and parking lots.	The project landscaping plan incorporates existing trees and planted trees that would provide shade.
Policy CO 8.3.8: Encourage energy-conserving heating and cooling systems and appliances, and energy-efficiency in windows and insulation, in all new construction.	The project would be required to comply with applicable energy-efficiency requirements, including the State CALGreen Code.
Policy CO 8.3.9: Limit excessive lighting levels and encourage a reduction of lighting when businesses are closed to a level required for security.	The proposed assisted living and memory care facility would not include excessive lighting for exterior signage or parking lots.
Policy CO 8.3.12: Reduce extensive heat gain from paved surfaces through development standards wherever feasible.	The project includes little aboveground paved surfaces. Most parking would be in underground garage levels or partially below grade.
Objective CO 8.4: Reduce energy consumption for processing raw materials by promoting recycling and materials recovery by all residents and businesses throughout the community.	
Policy CO 8.4.2: Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.	The project would have to comply with any mandatory recycling programs during operation.
Policy CO 8.4.4: Promote commercial and industrial recycling, including recycling of construction and demolition debris.	The project is not a commercial or industrial use. However, the project would have to comply with any mandatory construction debris recycling requirements during construction.

The CAP includes local GHG reduction measures that would result in appreciable reductions in GHG emissions. The California Green Building Standards Code (CALGreen), which comprises the California Code of Regulations (CCR) Title 24, Part 11, provides mandatory measures that require incorporation of efficiency features in residential and non-residential developments that reduce GHG emissions. The GHG reduction measures included in the CAP Goal for 2020 that may be applicable for development of an assisted living and memory care facility are shown in **Table 12, CAP Consistency**, with a summary of how the project would be consistent with those measures.

Table 12
CAP Consistency

GHG Reduction Measures included in the CAP Goal for 2020	Project Consistency
AE-2: Establish Onsite Renewable Energy Systems-Solar Power	The project will install rooftop solar panels to supplement electricity from utilities.
LUT-5: Increase Transit Accessibility	The proposed assisted living and memory care facility would provide a private shuttle bus/van and car service for use by residents.
WUW-1: Install Low-Flow Water Fixtures	The project would be required to install low-flow water fixtures that meet applicable code restrictions, including the State CALGreen Code.
WUW-4: Use Water Efficient Landscape Irrigation	The project would be required to install irrigation equipment and controllers that meet applicable codes for water conservation of the City's Water Conservation in Landscaping Ordinance, and/or the State CALGreen Code.
SW-1: Institute or Extend Recycling and Composting Services	The project would provide trash storage areas with separate bins for recyclable materials.
V-1: Urban Tree Planting	The project's landscape plan includes a total of 16 trees to be planted within the development footprint, and would retain native oak woodland areas within the property outside of the proposed development footprint.

As shown in Table 12, the project would be consistent with applicable reduction measures of the City's CAP for reducing emissions of GHGs. Therefore, the project would result in no impact related to inconsistency with the applicable plan, policy or regulation adopted to reduce GHG emissions.

GHG Conclusions

The project would not conflict with the City's CAP, which is the applicable GHG emissions reduction plan. The project would also not conflict with the applicable policies of the City's General Plan regarding GHG reduction. Therefore, the project would not result in significant impacts regarding GHG emissions during construction or operations, and no mitigation measures would be required.

Appendix A

CalEEMod Version 2016.3.2
Computer Model Output

Sierra West Assisted Living

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	73.00	Space	0.00	29,200.00	0
Parking Lot	4.00	Space	0.00	1,600.00	0
Congregate Care (Assisted Living)	83.00	Dwelling Unit	1.10	61,734.00	237

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 1.1 ac area. 83 unit senior assisted living, 61,734 sf. 73 space parking garage. 4 space parking lot.

Construction Phase - site prep 9. grading 30. building 400. pave 20. coat 20

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - 1 excavator. 1 loader

Off-road Equipment -

Off-road Equipment - 1 dozer, 1 loader, 1 backhoe

Grading - 8,500 cy export

Vehicle Trips - 2.6 per unit

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	400.00
tblConstructionPhase	NumDays	4.00	30.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	9.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	70.55	0.00
tblFireplaces	NumberNoFireplace	8.30	0.00
tblFireplaces	NumberWood	4.15	0.00
tblGrading	AcresOfGrading	11.25	1.50
tblGrading	AcresOfGrading	4.50	1.00

tblGrading	MaterialExported	0.00	8,500.00
tblLandUse	LandUseSquareFeet	83,000.00	61,734.00
tblLandUse	LotAcreage	0.66	0.00
tblLandUse	LotAcreage	0.04	0.00
tblLandUse	LotAcreage	5.19	1.10
tblTripsAndVMT	HaulingTripNumber	1,063.00	1,062.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	2.20	2.60
tblVehicleTrips	SU_TR	2.44	2.60
tblVehicleTrips	WD_TR	2.74	2.60
tblWoodstoves	NumberCatalytic	4.15	0.00
tblWoodstoves	NumberNoncatalytic	4.15	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4389	31.7084	16.2651	0.0539	5.4766	0.9803	6.4446	2.9329	0.9030	3.8235	0.0000	5,523.2032	5,523.2032	1.0110	0.0000	5,548.4770
2021	2.1902	15.1859	15.7253	0.0331	0.9056	0.6931	1.5987	0.2422	0.6690	0.9112	0.0000	3,127.6278	3,127.6278	0.4023	0.0000	3,137.6856
2022	20.0120	13.9630	15.3428	0.0328	0.9056	0.5971	1.5027	0.2422	0.5765	0.8187	0.0000	3,097.5464	3,097.5464	0.4145	0.0000	3,107.3150
Maximum	**20.0120**	**31.7084**	**16.2651**	**0.0539**	**5.4766**	**0.9803**	**6.4446**	**2.9329**	**0.9030**	**3.8235**	**0.0000**	**5,523.2032**	**5,523.2032**	**1.0110**	**0.0000**	**5,548.4770**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	2.4389	31.7084	16.2651	0.0539	2.8346	0.9803	3.8149	1.3328	0.9030	2.2330	0.0000	5,523.2032	5,523.2032	1.0110	0.0000	5,548.4770
2021	2.1902	15.1859	15.7253	0.0331	0.9056	0.6931	1.5987	0.2422	0.6690	0.9112	0.0000	3,127.6278	3,127.6278	0.4023	0.0000	3,137.6856
2022	20.0120	13.9630	15.3428	0.0328	0.9056	0.5971	1.5027	0.2422	0.5765	0.8187	0.0000	3,097.5464	3,097.5464	0.4145	0.0000	3,107.3150
Maximum	**20.0120**	**31.7084**	**16.2651**	**0.0539**	**2.8346**	**0.9803**	**3.8149**	**1.3328**	**0.9030**	**2.2330**	**0.0000**	**5,523.2032**	**5,523.2032**	**1.0110**	**0.0000**	**5,548.4770**

Sierra West Assisted Living - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	36.25	0.00	27.55	46.82	0.00	28.64	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5492	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379	0.0000	12.3467	12.3467	0.0119	0.0000	12.6452
Energy	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123
Mobile	0.3569	1.9604	4.6887	0.0181	1.5680	0.0146	1.5826	0.4195	0.0136	0.4332		1,841.4744	1,841.4744	0.0894		1,843.7081
Total	**1.9390**	**2.3202**	**11.6710**	**0.0202**	**1.5680**	**0.0752**	**1.6432**	**0.4195**	**0.0742**	**0.4938**	**0.0000**	**2,212.2038**	**2,212.2038**	**0.1082**	**6.5700e-003**	**2,216.8656**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.5492	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379	0.0000	12.3467	12.3467	0.0119	0.0000	12.6452
Energy	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123
Mobile	0.3569	1.9604	4.6887	0.0181	1.5680	0.0146	1.5826	0.4195	0.0136	0.4332		1,841.4744	1,841.4744	0.0894		1,843.7081
Total	**1.9390**	**2.3202**	**11.6710**	**0.0202**	**1.5680**	**0.0752**	**1.6432**	**0.4195**	**0.0742**	**0.4938**	**0.0000**	**2,212.2038**	**2,212.2038**	**0.1082**	**6.5700e-003**	**2,216.8656**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2020	9/11/2020	5	9	
2	Grading	Grading	9/14/2020	10/23/2020	5	30	
3	Building Construction	Building Construction	10/26/2020	5/6/2022	5	400	
4	Paving	Paving	5/9/2022	6/3/2022	5	20	
5	Architectural Coating	Architectural Coating	6/6/2022	7/1/2022	5	20	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 125,011; Residential Outdoor: 41,670; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,848 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Graders	1	8.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	1,062.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	73.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3872	0.0000	5.3872	2.9092	0.0000	2.9092			0.0000			0.0000
Off-Road	2.0040	22.7560	9.3447	0.0235		0.9673	0.9673		0.8900	0.8900		2,272.5718	2,272.5718	0.7350		2,290.9467
Total	**2.0040**	**22.7560**	**9.3447**	**0.0235**	**5.3872**	**0.9673**	**6.3545**	**2.9092**	**0.8900**	**3.7991**		**2,272.5718**	**2,272.5718**	**0.7350**		**2,290.9467**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0266	0.2945	8.6000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.2000e-004	0.0243		85.6292	85.6292	2.4600e-003		85.6906
Total	**0.0395**	**0.0266**	**0.2945**	**8.6000e-004**	**0.0894**	**6.8000e-004**	**0.0901**	**0.0237**	**6.2000e-004**	**0.0243**		**85.6292**	**85.6292**	**2.4600e-003**		**85.6906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4242	0.0000	2.4242	1.3091	0.0000	1.3091			0.0000			0.0000
Off-Road	2.0040	22.7560	9.3447	0.0235		0.9673	0.9673		0.8900	0.8900	0.0000	2,272.5718	2,272.5718	0.7350		2,290.9467
Total	**2.0040**	**22.7560**	**9.3447**	**0.0235**	**2.4242**	**0.9673**	**3.3916**	**1.3091**	**0.8900**	**2.1991**	**0.0000**	**2,272.5718**	**2,272.5718**	**0.7350**		**2,290.9467**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0266	0.2945	8.6000e-004	0.0894	6.8000e-004	0.0901	0.0237	6.2000e-004	0.0243		85.6292	85.6292	2.4600e-003		85.6906
Total	**0.0395**	**0.0266**	**0.2945**	**8.6000e-004**	**0.0894**	**6.8000e-004**	**0.0901**	**0.0237**	**6.2000e-004**	**0.0243**		**85.6292**	**85.6292**	**2.4600e-003**		**85.6906**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.6016	0.0000	4.6016	2.4933	0.0000	2.4933			0.0000			0.0000
Off-Road	1.9689	21.9076	11.3575	0.0255		0.9476	0.9476		0.8718	0.8718		2,470.9967	2,470.9967	0.7992		2,490.9759
Total	**1.9689**	**21.9076**	**11.3575**	**0.0255**	**4.6016**	**0.9476**	**5.5493**	**2.4933**	**0.8718**	**3.3651**		**2,470.9967**	**2,470.9967**	**0.7992**		**2,490.9759**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2766	9.7575	2.0635	0.0269	0.6186	0.0315	0.6501	0.1695	0.0302	0.1997		2,913.0591	2,913.0591	0.2078		2,918.2539
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0433	0.4785	1.4000e-003	0.1453	1.1000e-003	0.1464	0.0385	1.0200e-003	0.0396		139.1474	139.1474	3.9900e-003		139.2472
Total	**0.3407**	**9.8008**	**2.5421**	**0.0283**	**0.7639**	**0.0326**	**0.7965**	**0.2081**	**0.0312**	**0.2392**		**3,052.2065**	**3,052.2065**	**0.2118**		**3,057.5011**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0707	0.0000	2.0707	1.1220	0.0000	1.1220			0.0000			0.0000
Off-Road	1.9689	21.9076	11.3575	0.0255		0.9476	0.9476		0.8718	0.8718	0.0000	2,470.9967	2,470.9967	0.7992		2,490.9759
Total	**1.9689**	**21.9076**	**11.3575**	**0.0255**	**2.0707**	**0.9476**	**3.0184**	**1.1220**	**0.8718**	**1.9938**	**0.0000**	**2,470.9967**	**2,470.9967**	**0.7992**		**2,490.9759**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2766	9.7575	2.0635	0.0269	0.6186	0.0315	0.6501	0.1695	0.0302	0.1997		2,913.0591	2,913.0591	0.2078		2,918.2539
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0433	0.4785	1.4000e-003	0.1453	1.1000e-003	0.1464	0.0385	1.0200e-003	0.0396		139.1474	139.1474	3.9900e-003		139.2472
Total	**0.3407**	**9.8008**	**2.5421**	**0.0283**	**0.7639**	**0.0326**	**0.7965**	**0.2081**	**0.0312**	**0.2392**		**3,052.2065**	**3,052.2065**	**0.2118**		**3,057.5011**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**		**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0482	1.4676	0.3900	3.5000e-003	0.0896	7.3900e-003	0.0970	0.0258	7.0700e-003	0.0329		373.1179	373.1179	0.0259		373.7656
Worker	0.3602	0.2431	2.6870	7.8400e-003	0.8160	6.1900e-003	0.8222	0.2164	5.7000e-003	0.2221		781.3664	781.3664	0.0224		781.9266
Total	**0.4084**	**1.7107**	**3.0771**	**0.0113**	**0.9056**	**0.0136**	**0.9192**	**0.2422**	**0.0128**	**0.2550**		**1,154.4844**	**1,154.4844**	**0.0483**		**1,155.6923**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**	**0.0000**	**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0482	1.4676	0.3900	3.5000e-003	0.0896	7.3900e-003	0.0970	0.0258	7.0700e-003	0.0329		373.1179	373.1179	0.0259		373.7656
Worker	0.3602	0.2431	2.6870	7.8400e-003	0.8160	6.1900e-003	0.8222	0.2164	5.7000e-003	0.2221		781.3664	781.3664	0.0224		781.9266
Total	**0.4084**	**1.7107**	**3.0771**	**0.0113**	**0.9056**	**0.0136**	**0.9192**	**0.2422**	**0.0128**	**0.2550**		**1,154.4844**	**1,154.4844**	**0.0483**		**1,155.6923**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**		**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3310	0.3546	3.4700e-003	0.0896	2.7700e-003	0.0924	0.0258	2.6500e-003	0.0285		370.3703	370.3703	0.0248		370.9898
Worker	0.3367	0.2188	2.4713	7.5900e-003	0.8160	6.0100e-003	0.8220	0.2164	5.5300e-003	0.2219		756.0376	756.0376	0.0203		756.5441
Total	**0.3777**	**1.5498**	**2.8259**	**0.0111**	**0.9056**	**8.7800e-003**	**0.9144**	**0.2422**	**8.1800e-003**	**0.2504**		**1,126.4078**	**1,126.4078**	**0.0450**		**1,127.5339**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**	**0.0000**	**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0410	1.3310	0.3546	3.4700e-003	0.0896	2.7700e-003	0.0924	0.0258	2.6500e-003	0.0285		370.3703	370.3703	0.0248		370.9898
Worker	0.3367	0.2188	2.4713	7.5900e-003	0.8160	6.0100e-003	0.8220	0.2164	5.5300e-003	0.2219		756.0376	756.0376	0.0203		756.5441
Total	**0.3777**	**1.5498**	**2.8259**	**0.0111**	**0.9056**	**8.7800e-003**	**0.9144**	**0.2422**	**8.1800e-003**	**0.2504**		**1,126.4078**	**1,126.4078**	**0.0450**		**1,127.5339**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689		2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**		**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	1.2624	0.3353	3.4400e-003	0.0896	2.4100e-003	0.0920	0.0258	2.3000e-003	0.0281		367.0719	367.0719	0.0238		367.6679
Worker	0.3166	0.1976	2.2811	7.3100e-003	0.8160	5.8300e-003	0.8218	0.2164	5.3700e-003	0.2218		728.9317	728.9317	0.0183		729.3891
Total	**0.3551**	**1.4600**	**2.6164**	**0.0108**	**0.9056**	**8.2400e-003**	**0.9138**	**0.2422**	**7.6700e-003**	**0.2499**		**1,096.0036**	**1,096.0036**	**0.0421**		**1,097.0570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6487	12.5031	12.7264	0.0221		0.5889	0.5889		0.5689	0.5689	0.0000	2,001.5429	2,001.5429	0.3486		2,010.2581
Total	**1.6487**	**12.5031**	**12.7264**	**0.0221**		**0.5889**	**0.5889**		**0.5689**	**0.5689**	**0.0000**	**2,001.5429**	**2,001.5429**	**0.3486**		**2,010.2581**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0385	1.2624	0.3353	3.4400e-003	0.0896	2.4100e-003	0.0920	0.0258	2.3000e-003	0.0281		367.0719	367.0719	0.0238		367.6679
Worker	0.3166	0.1976	2.2811	7.3100e-003	0.8160	5.8300e-003	0.8218	0.2164	5.3700e-003	0.2218		728.9317	728.9317	0.0183		729.3891
Total	**0.3551**	**1.4600**	**2.6164**	**0.0108**	**0.9056**	**8.2400e-003**	**0.9138**	**0.2422**	**7.6700e-003**	**0.2499**		**1,096.0036**	**1,096.0036**	**0.0421**		**1,097.0570**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205		1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6877**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**		**1,297.3789**	**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	**0.0564**	**0.0352**	**0.4062**	**1.3000e-003**	**0.1453**	**1.0400e-003**	**0.1464**	**0.0385**	**9.6000e-004**	**0.0395**		**129.8098**	**129.8098**	**3.2600e-003**		**129.8912**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6877	6.7738	8.8060	0.0135		0.3474	0.3474		0.3205	0.3205	0.0000	1,297.3789	1,297.3789	0.4113		1,307.6608
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6877**	**6.7738**	**8.8060**	**0.0135**		**0.3474**	**0.3474**		**0.3205**	**0.3205**	**0.0000**	**1,297.3789**	**1,297.3789**	**0.4113**		**1,307.6608**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0564	0.0352	0.4062	1.3000e-003	0.1453	1.0400e-003	0.1464	0.0385	9.6000e-004	0.0395		129.8098	129.8098	3.2600e-003		129.8912
Total	**0.0564**	**0.0352**	**0.4062**	**1.3000e-003**	**0.1453**	**1.0400e-003**	**0.1464**	**0.0385**	**9.6000e-004**	**0.0395**		**129.8098**	**129.8098**	**3.2600e-003**		**129.8912**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.7424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**19.9470**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745
Total	**0.0651**	**0.0406**	**0.4687**	**1.5000e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**149.7805**	**149.7805**	**3.7600e-003**		**149.8745**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	19.7424					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**19.9470**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4687	1.5000e-003	0.1677	1.2000e-003	0.1689	0.0445	1.1000e-003	0.0456		149.7805	149.7805	3.7600e-003		149.8745
Total	**0.0651**	**0.0406**	**0.4687**	**1.5000e-003**	**0.1677**	**1.2000e-003**	**0.1689**	**0.0445**	**1.1000e-003**	**0.0456**		**149.7805**	**149.7805**	**3.7600e-003**		**149.8745**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3569	1.9604	4.6887	0.0181	1.5680	0.0146	1.5826	0.4195	0.0136	0.4332		1,841.4744	1,841.4744	0.0894		1,843.7081
Unmitigated	0.3569	1.9604	4.6887	0.0181	1.5680	0.0146	1.5826	0.4195	0.0136	0.4332		1,841.4744	1,841.4744	0.0894		1,843.7081

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	215.80	215.80	215.80	737,421	737,421
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	215.80	215.80	215.80	737,421	737,421

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123
NaturalGas Unmitigated	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	3046.25	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0329**	**0.2807**	**0.1195**	**1.7900e-003**		**0.0227**	**0.0227**		**0.0227**	**0.0227**		**358.3826**	**358.3826**	**6.8700e-003**	**6.5700e-003**	**360.5123**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Congregate Care (Assisted Living)	3.04625	0.0329	0.2807	0.1195	1.7900e-003		0.0227	0.0227		0.0227	0.0227		358.3826	358.3826	6.8700e-003	6.5700e-003	360.5123
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0329**	**0.2807**	**0.1195**	**1.7900e-003**		**0.0227**	**0.0227**		**0.0227**	**0.0227**		**358.3826**	**358.3826**	**6.8700e-003**	**6.5700e-003**	**360.5123**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.5492	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379	0.0000	12.3467	12.3467	0.0119	0.0000	12.6452
Unmitigated	1.5492	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379	0.0000	12.3467	12.3467	0.0119	0.0000	12.6452

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1082					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2078	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379		12.3467	12.3467	0.0119		12.6452
Total	**1.5492**	**0.0791**	**6.8629**	**3.6000e-004**		**0.0379**	**0.0379**		**0.0379**	**0.0379**	**0.0000**	**12.3467**	**12.3467**	**0.0119**	**0.0000**	**12.6452**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1082					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2332					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2078	0.0791	6.8629	3.6000e-004		0.0379	0.0379		0.0379	0.0379		12.3467	12.3467	0.0119		12.6452
Total	**1.5492**	**0.0791**	**6.8629**	**3.6000e-004**		**0.0379**	**0.0379**		**0.0379**	**0.0379**	**0.0000**	**12.3467**	**12.3467**	**0.0119**	**0.0000**	**12.6452**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Sierra West Assisted Living

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	73.00	Space	0.00	29,200.00	0
Parking Lot	4.00	Space	0.00	1,600.00	0
Congregate Care (Assisted Living)	83.00	Dwelling Unit	1.10	61,734.00	237

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Sierra West Assisted Living - South Coast AQMD Air District, Annual

Project Characteristics -

Land Use - 1.1 ac area. 83 unit senior assisted living, 61,734 sf. 73 space parking garage. 4 space parking lot.

Construction Phase - site prep 9. grading 30. building 400. pave 20. coat 20

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - 1 excavator. 1 loader

Off-road Equipment -

Off-road Equipment - 1 dozer, 1 loader, 1 backhoe

Grading - 8,500 cy export

Vehicle Trips - 2.6 per unit

Woodstoves - No hearths

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	200.00	400.00
tblConstructionPhase	NumDays	4.00	30.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	9.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	70.55	0.00
tblFireplaces	NumberNoFireplace	8.30	0.00
tblFireplaces	NumberWood	4.15	0.00
tblGrading	AcresOfGrading	11.25	1.50
tblGrading	AcresOfGrading	4.50	1.00

tblGrading	MaterialExported	0.00	8,500.00
tblLandUse	LandUseSquareFeet	83,000.00	61,734.00
tblLandUse	LotAcreage	0.66	0.00
tblLandUse	LotAcreage	0.04	0.00
tblLandUse	LotAcreage	5.19	1.10
tblTripsAndVMT	HaulingTripNumber	1,063.00	1,062.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblVehicleTrips	ST_TR	2.20	2.60
tblVehicleTrips	SU_TR	2.44	2.60
tblVehicleTrips	WD_TR	2.74	2.60
tblWoodstoves	NumberCatalytic	4.15	0.00
tblWoodstoves	NumberNoncatalytic	4.15	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1025	0.9859	0.6508	1.7400e-003	0.1267	0.0389	0.1656	0.0595	0.0367	0.0962	0.0000	155.8334	155.8334	0.0260	0.0000	156.4839
2021	0.2814	1.9856	2.0592	4.3400e-003	0.1160	0.0905	0.2065	0.0311	0.0873	0.1184	0.0000	372.5662	372.5662	0.0476	0.0000	373.7551
2022	0.2962	0.7122	0.8079	1.6800e-003	0.0431	0.0312	0.0743	0.0115	0.0300	0.0415	0.0000	144.1261	144.1261	0.0199	0.0000	144.6233
Maximum	**0.2962**	**1.9856**	**2.0592**	**4.3400e-003**	**0.1267**	**0.0905**	**0.2065**	**0.0595**	**0.0873**	**0.1184**	**0.0000**	**372.5662**	**372.5662**	**0.0476**	**0.0000**	**373.7551**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1025	0.9859	0.6508	1.7400e-003	0.0754	0.0389	0.1143	0.0317	0.0367	0.0684	0.0000	155.8333	155.8333	0.0260	0.0000	156.4838
2021	0.2814	1.9856	2.0592	4.3400e-003	0.1160	0.0905	0.2065	0.0311	0.0873	0.1184	0.0000	372.5659	372.5659	0.0476	0.0000	373.7549
2022	0.2962	0.7122	0.8079	1.6800e-003	0.0431	0.0312	0.0743	0.0115	0.0300	0.0415	0.0000	144.1260	144.1260	0.0199	0.0000	144.6232
Maximum	**0.2962**	**1.9856**	**2.0592**	**4.3400e-003**	**0.1160**	**0.0905**	**0.2065**	**0.0317**	**0.0873**	**0.1184**	**0.0000**	**372.5659**	**372.5659**	**0.0476**	**0.0000**	**373.7549**

Sierra West Assisted Living - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**17.95**	**0.00**	**11.49**	**27.20**	**0.00**	**10.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**9-1-2020**	**11-30-2020**	0.8261	0.8261
2	**12-1-2020**	**2-28-2021**	0.5758	0.5758
3	**3-1-2021**	**5-31-2021**	0.5699	0.5699
4	**6-1-2021**	**8-31-2021**	0.5694	0.5694
5	**9-1-2021**	**11-30-2021**	0.5642	0.5642
6	**12-1-2021**	**2-28-2022**	0.5288	0.5288
7	**3-1-2022**	**5-31-2022**	0.4435	0.4435
8	**6-1-2022**	**8-31-2022**	0.2073	0.2073
		Highest	0.8261	0.8261

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2708	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339
Energy	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	221.0888	221.0888	7.8200e-003	2.4700e-003	222.0201
Mobile	0.0636	0.3632	0.8674	3.3400e-003	0.2802	2.6400e-003	0.2829	0.0751	2.4700e-003	0.0776	0.0000	308.4889	308.4889	0.0147	0.0000	308.8552
Waste						0.0000	0.0000		0.0000	0.0000	15.3745	0.0000	15.3745	0.9086	0.0000	38.0898
Water						0.0000	0.0000		0.0000	0.0000	1.7156	34.5040	36.2197	0.1776	4.4600e-003	41.9883
Total	**0.3404**	**0.4243**	**1.7471**	**3.7200e-003**	**0.2802**	**0.0115**	**0.2917**	**0.0751**	**0.0114**	**0.0864**	**17.0902**	**565.4818**	**582.5720**	**1.1101**	**6.9300e-003**	**612.3874**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2708	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339
Energy	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	221.0888	221.0888	7.8200e-003	2.4700e-003	222.0201
Mobile	0.0636	0.3632	0.8674	3.3400e-003	0.2802	2.6400e-003	0.2829	0.0751	2.4700e-003	0.0776	0.0000	308.4889	308.4889	0.0147	0.0000	308.8552
Waste						0.0000	0.0000		0.0000	0.0000	15.3745	0.0000	15.3745	0.9086	0.0000	38.0898
Water						0.0000	0.0000		0.0000	0.0000	1.7156	34.5040	36.2197	0.1776	4.4600e-003	41.9883
Total	**0.3404**	**0.4243**	**1.7471**	**3.7200e-003**	**0.2802**	**0.0115**	**0.2917**	**0.0751**	**0.0114**	**0.0864**	**17.0902**	**565.4818**	**582.5720**	**1.1101**	**6.9300e-003**	**612.3874**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2020	9/11/2020	5	9	
2	Grading	Grading	9/14/2020	10/23/2020	5	30	
3	Building Construction	Building Construction	10/26/2020	5/6/2022	5	400	
4	Paving	Paving	5/9/2022	6/3/2022	5	20	
5	Architectural Coating	Architectural Coating	6/6/2022	7/1/2022	5	20	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 125,011; Residential Outdoor: 41,670; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,848 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Rubber Tired Loaders	1	8.00	203	0.36
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48
Site Preparation	Graders	1	8.00	187	0.41

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	4	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	1,062.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	73.00	14.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0242	0.0000	0.0242	0.0131	0.0000	0.0131	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0200e-003	0.1024	0.0421	1.1000e-004		4.3500e-003	4.3500e-003		4.0000e-003	4.0000e-003	0.0000	9.2774	9.2774	3.0000e-003	0.0000	9.3524
Total	**9.0200e-003**	**0.1024**	**0.0421**	**1.1000e-004**	**0.0242**	**4.3500e-003**	**0.0286**	**0.0131**	**4.0000e-003**	**0.0171**	**0.0000**	**9.2774**	**9.2774**	**3.0000e-003**	**0.0000**	**9.3524**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3600e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3556	0.3556	1.0000e-005	0.0000	0.3558
Total	**1.6000e-004**	**1.2000e-004**	**1.3600e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3556**	**0.3556**	**1.0000e-005**	**0.0000**	**0.3558**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0109	0.0000	0.0109	5.8900e-003	0.0000	5.8900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0200e-003	0.1024	0.0421	1.1000e-004		4.3500e-003	4.3500e-003		4.0000e-003	4.0000e-003	0.0000	9.2774	9.2774	3.0000e-003	0.0000	9.3524
Total	**9.0200e-003**	**0.1024**	**0.0421**	**1.1000e-004**	**0.0109**	**4.3500e-003**	**0.0153**	**5.8900e-003**	**4.0000e-003**	**9.8900e-003**	**0.0000**	**9.2774**	**9.2774**	**3.0000e-003**	**0.0000**	**9.3524**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.2000e-004	1.3600e-003	0.0000	3.9000e-004	0.0000	4.0000e-004	1.0000e-004	0.0000	1.1000e-004	0.0000	0.3556	0.3556	1.0000e-005	0.0000	0.3558
Total	**1.6000e-004**	**1.2000e-004**	**1.3600e-003**	**0.0000**	**3.9000e-004**	**0.0000**	**4.0000e-004**	**1.0000e-004**	**0.0000**	**1.1000e-004**	**0.0000**	**0.3556**	**0.3556**	**1.0000e-005**	**0.0000**	**0.3558**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0690	0.0000	0.0690	0.0374	0.0000	0.0374	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0295	0.3286	0.1704	3.8000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	33.6248	33.6248	0.0109	0.0000	33.8966
Total	**0.0295**	**0.3286**	**0.1704**	**3.8000e-004**	**0.0690**	**0.0142**	**0.0832**	**0.0374**	**0.0131**	**0.0505**	**0.0000**	**33.6248**	**33.6248**	**0.0109**	**0.0000**	**33.8966**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0800e-003	0.1490	0.0297	4.1000e-004	9.1300e-003	4.7000e-004	9.6000e-003	2.5100e-003	4.5000e-004	2.9500e-003	0.0000	40.0714	40.0714	2.7600e-003	0.0000	40.1404
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.7000e-004	7.3900e-003	2.0000e-005	2.1400e-003	2.0000e-005	2.1600e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	1.9260	1.9260	6.0000e-005	0.0000	1.9273
Total	**4.9500e-003**	**0.1497**	**0.0371**	**4.3000e-004**	**0.0113**	**4.9000e-004**	**0.0118**	**3.0800e-003**	**4.7000e-004**	**3.5300e-003**	**0.0000**	**41.9973**	**41.9973**	**2.8200e-003**	**0.0000**	**42.0677**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0311	0.0000	0.0311	0.0168	0.0000	0.0168	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0295	0.3286	0.1704	3.8000e-004		0.0142	0.0142		0.0131	0.0131	0.0000	33.6247	33.6247	0.0109	0.0000	33.8966
Total	**0.0295**	**0.3286**	**0.1704**	**3.8000e-004**	**0.0311**	**0.0142**	**0.0453**	**0.0168**	**0.0131**	**0.0299**	**0.0000**	**33.6247**	**33.6247**	**0.0109**	**0.0000**	**33.8966**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0800e-003	0.1490	0.0297	4.1000e-004	9.1300e-003	4.7000e-004	9.6000e-003	2.5100e-003	4.5000e-004	2.9500e-003	0.0000	40.0714	40.0714	2.7600e-003	0.0000	40.1404
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7000e-004	6.7000e-004	7.3900e-003	2.0000e-005	2.1400e-003	2.0000e-005	2.1600e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	1.9260	1.9260	6.0000e-005	0.0000	1.9273
Total	**4.9500e-003**	**0.1497**	**0.0371**	**4.3000e-004**	**0.0113**	**4.9000e-004**	**0.0118**	**3.0800e-003**	**4.7000e-004**	**3.5300e-003**	**0.0000**	**41.9973**	**41.9973**	**2.8200e-003**	**0.0000**	**42.0677**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0498	0.3623	0.3231	5.4000e-004		0.0195	0.0195		0.0188	0.0188	0.0000	44.4778	44.4778	8.2600e-003	0.0000	44.6842
Total	**0.0498**	**0.3623**	**0.3231**	**5.4000e-004**		**0.0195**	**0.0195**		**0.0188**	**0.0188**	**0.0000**	**44.4778**	**44.4778**	**8.2600e-003**	**0.0000**	**44.6842**

3.4 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0366	9.0700e-003	9.0000e-005	2.1600e-003	1.8000e-004	2.3400e-003	6.2000e-004	1.7000e-004	8.0000e-004	0.0000	8.4362	8.4362	5.5000e-004	0.0000	8.4500
Worker	7.9800e-003	6.1200e-003	0.0677	2.0000e-004	0.0196	1.5000e-004	0.0198	5.2100e-003	1.4000e-004	5.3500e-003	0.0000	17.6644	17.6644	5.1000e-004	0.0000	17.6771
Total	**9.1300e-003**	**0.0427**	**0.0768**	**2.9000e-004**	**0.0218**	**3.3000e-004**	**0.0221**	**5.8300e-003**	**3.1000e-004**	**6.1500e-003**	**0.0000**	**26.1006**	**26.1006**	**1.0600e-003**	**0.0000**	**26.1271**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0498	0.3623	0.3231	5.4000e-004		0.0195	0.0195		0.0188	0.0188	0.0000	44.4778	44.4778	8.2600e-003	0.0000	44.6842
Total	**0.0498**	**0.3623**	**0.3231**	**5.4000e-004**		**0.0195**	**0.0195**		**0.0188**	**0.0188**	**0.0000**	**44.4778**	**44.4778**	**8.2600e-003**	**0.0000**	**44.6842**

3.4 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0366	9.0700e-003	9.0000e-005	2.1600e-003	1.8000e-004	2.3400e-003	6.2000e-004	1.7000e-004	8.0000e-004	0.0000	8.4362	8.4362	5.5000e-004	0.0000	8.4500
Worker	7.9800e-003	6.1200e-003	0.0677	2.0000e-004	0.0196	1.5000e-004	0.0198	5.2100e-003	1.4000e-004	5.3500e-003	0.0000	17.6644	17.6644	5.1000e-004	0.0000	17.6771
Total	**9.1300e-003**	**0.0427**	**0.0768**	**2.9000e-004**	**0.0218**	**3.3000e-004**	**0.0221**	**5.8300e-003**	**3.1000e-004**	**6.1500e-003**	**0.0000**	**26.1006**	**26.1006**	**1.0600e-003**	**0.0000**	**26.1271**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2365	1.7795	1.6834	2.8800e-003		0.0893	0.0893		0.0862	0.0862	0.0000	236.9197	236.9197	0.0423	0.0000	237.9771
Total	**0.2365**	**1.7795**	**1.6834**	**2.8800e-003**		**0.0893**	**0.0893**		**0.0862**	**0.0862**	**0.0000**	**236.9197**	**236.9197**	**0.0423**	**0.0000**	**237.9771**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-003	0.1768	0.0438	4.6000e-004	0.0115	3.6000e-004	0.0119	3.3200e-003	3.4000e-004	3.6600e-003	0.0000	44.6056	44.6056	2.8200e-003	0.0000	44.6761
Worker	0.0397	0.0294	0.3320	1.0100e-003	0.1045	7.8000e-004	0.1053	0.0278	7.2000e-004	0.0285	0.0000	91.0410	91.0410	2.4400e-003	0.0000	91.1020
Total	**0.0449**	**0.2061**	**0.3758**	**1.4700e-003**	**0.1160**	**1.1400e-003**	**0.1172**	**0.0311**	**1.0600e-003**	**0.0321**	**0.0000**	**135.6465**	**135.6465**	**5.2600e-003**	**0.0000**	**135.7781**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2365	1.7795	1.6834	2.8800e-003		0.0893	0.0893		0.0862	0.0862	0.0000	236.9194	236.9194	0.0423	0.0000	237.9768
Total	**0.2365**	**1.7795**	**1.6834**	**2.8800e-003**		**0.0893**	**0.0893**		**0.0862**	**0.0862**	**0.0000**	**236.9194**	**236.9194**	**0.0423**	**0.0000**	**237.9768**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2000e-003	0.1768	0.0438	4.6000e-004	0.0115	3.6000e-004	0.0119	3.3200e-003	3.4000e-004	3.6600e-003	0.0000	44.6056	44.6056	2.8200e-003	0.0000	44.6761
Worker	0.0397	0.0294	0.3320	1.0100e-003	0.1045	7.8000e-004	0.1053	0.0278	7.2000e-004	0.0285	0.0000	91.0410	91.0410	2.4400e-003	0.0000	91.1020
Total	**0.0449**	**0.2061**	**0.3758**	**1.4700e-003**	**0.1160**	**1.1400e-003**	**0.1172**	**0.0311**	**1.0600e-003**	**0.0321**	**0.0000**	**135.6465**	**135.6465**	**5.2600e-003**	**0.0000**	**135.7781**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0742	0.5626	0.5727	9.9000e-004		0.0265	0.0265		0.0256	0.0256	0.0000	81.7096	81.7096	0.0142	0.0000	82.0654
Total	**0.0742**	**0.5626**	**0.5727**	**9.9000e-004**		**0.0265**	**0.0265**		**0.0256**	**0.0256**	**0.0000**	**81.7096**	**81.7096**	**0.0142**	**0.0000**	**82.0654**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0578	0.0143	1.6000e-004	3.9700e-003	1.1000e-004	4.0800e-003	1.1500e-003	1.0000e-004	1.2500e-003	0.0000	15.2458	15.2458	9.4000e-004	0.0000	15.2692
Worker	0.0129	9.1400e-003	0.1057	3.3000e-004	0.0360	2.6000e-004	0.0363	9.5700e-003	2.4000e-004	9.8100e-003	0.0000	30.2679	30.2679	7.6000e-004	0.0000	30.2869
Total	**0.0145**	**0.0669**	**0.1200**	**4.9000e-004**	**0.0400**	**3.7000e-004**	**0.0404**	**0.0107**	**3.4000e-004**	**0.0111**	**0.0000**	**45.5137**	**45.5137**	**1.7000e-003**	**0.0000**	**45.5561**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0742	0.5626	0.5727	9.9000e-004		0.0265	0.0265		0.0256	0.0256	0.0000	81.7095	81.7095	0.0142	0.0000	82.0653
Total	**0.0742**	**0.5626**	**0.5727**	**9.9000e-004**		**0.0265**	**0.0265**		**0.0256**	**0.0256**	**0.0000**	**81.7095**	**81.7095**	**0.0142**	**0.0000**	**82.0653**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.6800e-003	0.0578	0.0143	1.6000e-004	3.9700e-003	1.1000e-004	4.0800e-003	1.1500e-003	1.0000e-004	1.2500e-003	0.0000	15.2458	15.2458	9.4000e-004	0.0000	15.2692
Worker	0.0129	9.1400e-003	0.1057	3.3000e-004	0.0360	2.6000e-004	0.0363	9.5700e-003	2.4000e-004	9.8100e-003	0.0000	30.2679	30.2679	7.6000e-004	0.0000	30.2869
Total	**0.0145**	**0.0669**	**0.1200**	**4.9000e-004**	**0.0400**	**3.7000e-004**	**0.0404**	**0.0107**	**3.4000e-004**	**0.0111**	**0.0000**	**45.5137**	**45.5137**	**1.7000e-003**	**0.0000**	**45.5561**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8800e-003	0.0677	0.0881	1.4000e-004		3.4700e-003	3.4700e-003		3.2100e-003	3.2100e-003	0.0000	11.7696	11.7696	3.7300e-003	0.0000	11.8629
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.8800e-003**	**0.0677**	**0.0881**	**1.4000e-004**		**3.4700e-003**	**3.4700e-003**		**3.2100e-003**	**3.2100e-003**	**0.0000**	**11.7696**	**11.7696**	**3.7300e-003**	**0.0000**	**11.8629**

3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.6000e-004	4.1800e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1978	1.1978	3.0000e-005	0.0000	1.1986
Total	**5.1000e-004**	**3.6000e-004**	**4.1800e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1978**	**1.1978**	**3.0000e-005**	**0.0000**	**1.1986**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.8800e-003	0.0677	0.0881	1.4000e-004		3.4700e-003	3.4700e-003		3.2100e-003	3.2100e-003	0.0000	11.7696	11.7696	3.7300e-003	0.0000	11.8629
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.8800e-003**	**0.0677**	**0.0881**	**1.4000e-004**		**3.4700e-003**	**3.4700e-003**		**3.2100e-003**	**3.2100e-003**	**0.0000**	**11.7696**	**11.7696**	**3.7300e-003**	**0.0000**	**11.8629**

3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	3.6000e-004	4.1800e-003	1.0000e-005	1.4300e-003	1.0000e-005	1.4400e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1978	1.1978	3.0000e-005	0.0000	1.1986
Total	**5.1000e-004**	**3.6000e-004**	**4.1800e-003**	**1.0000e-005**	**1.4300e-003**	**1.0000e-005**	**1.4400e-003**	**3.8000e-004**	**1.0000e-005**	**3.9000e-004**	**0.0000**	**1.1978**	**1.1978**	**3.0000e-005**	**0.0000**	**1.1986**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.1995**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.2000e-004	4.8300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3821	1.3821	3.0000e-005	0.0000	1.3830
Total	**5.9000e-004**	**4.2000e-004**	**4.8300e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3821**	**1.3821**	**3.0000e-005**	**0.0000**	**1.3830**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1974					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.1995**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.2000e-004	4.8300e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3821	1.3821	3.0000e-005	0.0000	1.3830
Total	**5.9000e-004**	**4.2000e-004**	**4.8300e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3821**	**1.3821**	**3.0000e-005**	**0.0000**	**1.3830**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0636	0.3632	0.8674	3.3400e-003	0.2802	2.6400e-003	0.2829	0.0751	2.4700e-003	0.0776	0.0000	308.4889	308.4889	0.0147	0.0000	308.8552
Unmitigated	0.0636	0.3632	0.8674	3.3400e-003	0.2802	2.6400e-003	0.2829	0.0751	2.4700e-003	0.0776	0.0000	308.4889	308.4889	0.0147	0.0000	308.8552

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Congregate Care (Assisted Living)	215.80	215.80	215.80	737,421	737,421
Enclosed Parking with Elevator	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	215.80	215.80	215.80	737,421	737,421

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Congregate Care (Assisted	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Congregate Care (Assisted Living)	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Enclosed Parking with Elevator	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896
Parking Lot	0.549559	0.042893	0.201564	0.118533	0.015569	0.005846	0.021394	0.034255	0.002099	0.001828	0.004855	0.000709	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	161.7546	161.7546	6.6800e-003	1.3800e-003	162.3333
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	161.7546	161.7546	6.6800e-003	1.3800e-003	162.3333
NaturalGas Mitigated	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.3343	59.3343	1.1400e-003	1.0900e-003	59.6869
NaturalGas Unmitigated	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.3343	59.3343	1.1400e-003	1.0900e-003	59.6869

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	1.11188e+006	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.3343	59.3343	1.1400e-003	1.0900e-003	59.6869
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.0000e-003**	**0.0512**	**0.0218**	**3.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**59.3343**	**59.3343**	**1.1400e-003**	**1.0900e-003**	**59.6869**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Congregate Care (Assisted Living)	1.11188e+006	6.0000e-003	0.0512	0.0218	3.3000e-004		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	59.3343	59.3343	1.1400e-003	1.0900e-003	59.6869
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.0000e-003**	**0.0512**	**0.0218**	**3.3000e-004**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**59.3343**	**59.3343**	**1.1400e-003**	**1.0900e-003**	**59.6869**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	335998	107.0562	4.4200e-003	9.1000e-004	107.4392
Enclosed Parking with Elevator	171112	54.5200	2.2500e-003	4.7000e-004	54.7150
Parking Lot	560	0.1784	1.0000e-005	0.0000	0.1791
Total		**161.7546**	**6.6800e-003**	**1.3800e-003**	**162.3333**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Congregate Care (Assisted Living)	335998	107.0562	4.4200e-003	9.1000e-004	107.4392
Enclosed Parking with Elevator	171112	54.5200	2.2500e-003	4.7000e-004	54.7150
Parking Lot	560	0.1784	1.0000e-005	0.0000	0.1791
Total		**161.7546**	**6.6800e-003**	**1.3800e-003**	**162.3333**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2708	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339
Unmitigated	0.2708	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2251					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0260	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339
Total	**0.2708**	**9.8900e-003**	**0.8579**	**5.0000e-005**		**4.7400e-003**	**4.7400e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**1.4001**	**1.4001**	**1.3500e-003**	**0.0000**	**1.4339**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2251					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0260	9.8900e-003	0.8579	5.0000e-005		4.7400e-003	4.7400e-003		4.7400e-003	4.7400e-003	0.0000	1.4001	1.4001	1.3500e-003	0.0000	1.4339
Total	**0.2708**	**9.8900e-003**	**0.8579**	**5.0000e-005**		**4.7400e-003**	**4.7400e-003**		**4.7400e-003**	**4.7400e-003**	**0.0000**	**1.4001**	**1.4001**	**1.3500e-003**	**0.0000**	**1.4339**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	36.2197	0.1776	4.4600e-003	41.9883
Unmitigated	36.2197	0.1776	4.4600e-003	41.9883

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	5.40778 / 3.40926	36.2197	0.1776	4.4600e-003	41.9883
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.2197**	**0.1776**	**4.4600e-003**	**41.9883**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Congregate Care (Assisted Living)	5.40778 / 3.40926	36.2197	0.1776	4.4600e-003	41.9883
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.2197**	**0.1776**	**4.4600e-003**	**41.9883**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.3745	0.9086	0.0000	38.0898
Unmitigated	15.3745	0.9086	0.0000	38.0898

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	75.74	15.3745	0.9086	0.0000	38.0898
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3745**	**0.9086**	**0.0000**	**38.0898**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Congregate Care (Assisted Living)	75.74	15.3745	0.9086	0.0000	38.0898
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**15.3745**	**0.9086**	**0.0000**	**38.0898**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation