Appendix B

AQ, GHG, Energy Methodology and Assumptions Memorandum, Regulatory Setting, and CalEEMod Outputs

DUDEK

TECHNICAL MEMORANDUM

To:	Seamus Laffey, Senior Planner, City of West Sacramento
From:	Elena Nuño, Senior Air Quality Specialist, Dudek
Subject:	City of Dharma Realm Air Quality, Energy, and Greenhouse Gas Methodology and Assumptions
Date:	May 5, 2025
cc:	Christine Kronenberg, AICP, Principal
Attachment(s):	CalEEMod Output Files, Energy Calculations

1 Introduction and Purpose

The purpose of this memorandum is to provide a summary of the methodology and assumptions used to estimate criteria air pollutant, greenhouse gas (GHG) emissions, and energy use from the proposed City of Dharma Realm Project (CDR Project).

2 Project Description

The Dharma Realm Buddhist Association (DRBA) proposes the partial demolition of two buildings, the total demolition of a courtyard and associated courtyard features, and the "L" shaped structure in the southwest portion of the property. After demolition is complete, DRBA proposes to construct a new three (3)-story, approximately ninety (90)-foot-tall Temple Building. The proposed Temple Building would be 119,034 square feet (sf) and octagonal in shape, modeled after traditional Buddhist and Eastern architecture. In addition, a pedestrian bridge, or "grand stairway," would be constructed beginning in the southwest portion of the site and would consist of a mix of steps and a paved bridge pathway that would ascend over two (2) existing buildings to connect to the third (3rd) story of the building The total area of the Pedestrian Bridge (Sky Bridge) would be 19,620 sf for a total combined area of 119,034 sf. Lastly, the proposed project would require off-site improvements to widen El Rancho Court along the project Site frontage with new paving, curb and sidewalk.

3 Approach and Methodology

The California Emissions Estimator Model (CalEEMod) Version 2022 was used to estimate emissions from the construction and operational phases of the project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use projects, such as residential, commercial, and

industrial facilities. A summary of the CalEEMod land use inputs used to model the emissions of the project is displayed in Table 1.

Table 1. CalEEMod Land Use Development Summary for the Proposed Project

CalEEMod Land Use Type	Land Use Amount (Size)	Land Use Size Metric	Building Square Footage	Land Use Acreage[3]
Educational – Place of Worship	99.414	ksf	99,414	2.28
Educational – Place of Worship[1]	19.620	ksf	19,620	0.45
Parking – Parking Lot	175	sp	0	1.58
Parking – Other Non-Asphalt Surfaces	1.47	ac	0	1.47
Linear – Road Widening[2]	0.095	mi	0	0.5
Educational – User Defined[3,4]	1	N/A	0	0
Commercial – User Defined[4,5]	1	N/A	0	0
Retail – User Defined Retail[4,6]	1	N/A	0	0

Source: Initial Study Project Description
Notes:
1. Included in construction modeling only as the pedestrian bridge would not have any long-term operational emissions.
2. Included in construction modeling only as the road improvements would not have any long-term operational emissions.
3. Used to model vehicle trips associated with employees, visitors, and trips by resident nuns
4. User Defined land use categories in CalEEMod do not have any default emission factors for land use acreage, area sources, energy, mobile sources, etc. which allows the category to be customized for a particular emission source, such as vehicle trips only.
5. Used to model vehicle trips associated with deliveries
6. Used to model vehicle trips associated with shuttles during Type 2 Special Events.
ksf = 1,000 square feet; sp = space; ac = acre

3.1 Construction

Criteria air pollutant emissions associated with construction of the project were estimated using CalEEMod for the following emission sources: operation of off-road construction equipment, fugitive dust, volatile organic compound (VOC) off-gassing from paving and architectural coatings, on-road hauling, vendor (material delivery) trucks, and worker vehicles. CalEEMod input parameters were based on information provided by DRBA. or on default assumptions if project-specific data was not available. Construction was assumed to commence in June 2025 and last approximately 33 months.[1] Approximately 14,436 cubic yards of soil would be exported. Table 1 provides a summary of the construction schedule.

[1] The analysis assumes a construction start date of June 2025, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant and GHG emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

Table 1. Project Construction Schedule

Construction Phase	Start Date	End Date	Total Workdays
Project			
Demolition	6/2/2025	6/30/2025	20
Site Preparation/Utilities	7/1/2025	8/12/2025	31
Grading	8/13/2025	8/22/2025	8
Building Construction	8/25/2025	1/3/2028	616
Paving	1/4/2028	1/27/2028	18
Architectural Coating	1/10/2028	2/4/2028	20
Offsite Improvements			
Linear, Grubbing, and Land Clearing	6/2/2025	6/20/2025	13
Linear, Grading, and Excavation	6/21/2025	9/11/2025	59
Linear, Drainage, Utilities, and Sub-Grade	9/12/2025	11/7/2025	40
Linear, Paving	11/8/2025	12/6/2025	20

The construction equipment mix, estimated hours of equipment operation per day, and on-road vehicles used for the air emissions modeling of the project are shown in Table 2. Additional details regarding construction assumptions are provided in the modeling output, Attachment A.

Table 2. Construction Scenario Assumptions

Construction Phase	Average Daily One-Way Vehicle Trips				Equipment		
	Workers	Vendor Trucks	Haul Trucks	On-Site Trucks	Equipment Type	Quantity	Daily Usage Hours
Project							
Demolition	20	2	6	0	Rubber Tired Dozers	2	8
					Concrete/Industrial Saws	1	8
					Excavators	3	8
Site Preparation/ Utilities	2	6	0	0	Rubber Tired Dozers	3	8
					Tractors/Loaders/Backhoes	4	8
					Trenchers	1	8

Table 2. Construction Scenario Assumptions

Construction Phase	Average Daily One-Way Vehicle Trips				Equipment		
	Workers	Vendor Trucks	Haul Trucks	On-Site Trucks	Equipment Type	Quantity	Daily Usage Hours
Grading	20	6	226	0	Graders	1	8
					Excavators	1	8
					Tractors/Loaders/Backhoes	3	8
					Rubber Tired Dozers	1	8
Building Construction	50	20	0	0	Cranes	1	7
					Forklifts	3	8
					Generator Sets	1	8
					Welders	1	8
					Tractors/Loaders/Backhoes	3	7
Paving	20	2	0	0	Pavers	2	8
					Paving Equipment	2	8
					Rollers	2	8
Architectural Coatings	10	2	0	0	Air Compressors	1	6
Offsite Improvements							
Linear, Grubbing & Land Clearing	10	2	0	0	Crawler Tractors	1	8
					Excavators	2	8
					Signal Boards[1]	1	8
Linear, Grading & Excavation	38	2	0	0	Crawler Tractors	1	8
					Excavators	3	8
					Graders	2	8
					Rollers	2	8
					Rubber Tired Loader	1	8
					Scrapers	2	8
					Signal Boards[1]	1	8
					Tractors/Loaders/Backhoes	4	8
Linear, Drainage, Utilities & Sub-Grade	28	2	0	0	Air Compressors	1	8
					Generator Sets	1	8
					Graders	1	8
					Plate Compactors	1	8
					Pumps	1	8
					Rough Terrain Forklifts	1	8
					Scrapers	1	8
					Signal Boards[1]	1	8
					Tractors/Loaders/Backhoes	3	8
Linear, Paving	20	2	0	0	Pavers	1	8

Table 2. Construction Scenario Assumptions

Construction Phase	Average Daily One-Way Vehicle Trips				Equipment		
	Workers	Vendor Trucks	Haul Trucks	On-Site Trucks	Equipment Type	Quantity	Daily Usage Hours
					Paving Equipment	1	8
					Rollers	2	8
					Signal Boards[1]	1	8
					Tractors/Loaders/Backhoes	3	8

Notes:
1. CalEEMod default assumes electric-powered equipment.
See Attachment A for details.

For the analysis, it is generally assumed that heavy construction equipment would be operating at the site for a maximum of 8 hours per day, 5 days per week.

Default assumptions provided in CalEEMod were used to determine worker trips and vendor truck trips for each potential construction phase. The default CalEEMod trip distance for construction vehicles was assumed, which was a one-way distance of 14.30 miles for worker trips, 8.80 miles for vendor truck trips, and 20 miles for haul truck trips.

For additional details see Appendix A, *Air Quality and Greenhouse Gas Emissions CalEEMod Output Files*.

3.2 Operations

Project-generated operational criteria air pollutant emissions were estimated for mobile, area, energy, and stationary sources using CalEEMod. The first full year of operations was assumed to be 2028, consistent with the anticipated end of construction. The calculation of operational air pollutant emissions is explained below.

Mobile Sources

The project would generate criteria pollutant emissions from mobile sources (vehicular traffic) because of the vehicle trips associated with the visitors, employees, deliveries, and onsite residents. There are two types of Special Events at CDR.

Type 1 Special Event (Current or Existing Condition)

Type 1 Special Events are currently in place at CDR and involve 50 to 100 visiting worshippers, staying on-site, 4 to 6 times per year. All visitors park on-site. A total of 6 days per year were assumed.

Type 2 Special Event (Future Condition with Project)

Type 2 Special Events would occur once or twice per year on weekends with 1,000 to 2,000 visitors attending worship services at CDR. Shuttle buses would provide transportation to and from the proposed off-site parking lots to the project site. It is anticipated that these visitors would stay at local nearby visitor accommodations and not on-site. Type 2 Special Events would occur over 2 days for a total of 4 days per year.

Table 3 provides a summary of the project's trip generation.

Table 3. Project Trip Generation

Scenario	Use	Number/Units	# of Daily Trips	CalEEMod Description	CalEEMod Daily Trips
Typical Day	Employees[1]	5 persons	10	User Defined Educational	38
	Visitors [2]	10 persons	20		
	Personal Trips[3]	4 occurrences	8		
	Deliveries[4]	2 trucks	4	User Defined Commercial	4
Type 1 Special Event	Employees[5]	5 persons	10	User Defined Educational	105
	Visitors [6]	100 persons	85		
	Part-time Employees[7]	5 persons	10		
	Deliveries[8]	2 trucks	4	User Defined Commercial	4
Type 2 Special Event	Employees[9]	5 persons	10	User Defined Educational	2,100
	Part-time Employees[10]	45 persons	90		
	Visitors[11]	1,000 cars	2,000		
	Visitors[12]	12 shuttles	96	User Defined Retail	96
	Deliveries[13]	4 trucks	8	User Defined Commercial	8

Notes:

1 Approximately 5 full-time employees are assumed to work onsite. Each employee is assumed to drive separately; hence, each would generate two daily trips (one inbound and one outbound). All employees were assumed to commute in the AM and PM peak hour.

2 Approximately 10 visitors are assumed on a typical weekday. Each visitor is assumed to drive separately; hence, each would generate two daily trips (one inbound and one outbound). Visitors were assumed to be distributed over an 8-hour period.

3 A small number of personal trips were assumed for resident nuns. These trips were assumed to be distributed over an 8-hour period.

4 A small number of delivery trips were conservatively assumed to occur on a daily basis. No trips were assumed to occur during the peak hour.

5 Approximately 5 full-time employees are assumed to work onsite. Each employee is assumed to drive separately; hence, each would generate two daily trips (one inbound and one outbound). All employees were assumed to commute in the AM and PM peak hour.

6 Approximately 50-100 visitors attend Type 1 Special Event and stay for a period of 7-10 days. Assuming 15% of the visitors would carpool, 100 visitors would result in 85 inbound car trips. All visitor trips were assumed to arrive in the AM peak hour. Since the visitors stay for a period of 7-10 days, a small number of trips would occur in the PM peak hour of the same day.

7 Approximately 5 part-time employees were assumed to during Type 1 Special Event. Each employee is assumed to drive separately; hence, each would generate two daily trips (one inbound and one outbound). All employees were assumed to commute in the AM and PM peak hour.

8 A small number of delivery trips were conservatively assumed to occur on a daily basis. No trips were assumed to occur during the peak hour.

9 Approximately 5 full-time employees are assumed to work onsite. Each employee is assumed to drive separately; hence, each would generate two daily trips (one inbound and one outbound). All employees were assumed to commute in the AM and PM peak hour.

10 Approximately 45 part-time employees were assumed to work during Type 2 Special Event. Each employee is assumed to drive separately; hence each would generate two daily trips (one inbound and one outbound). All employees were assumed to commute in the AM and PM peak hour.

11. A maximum of 2,000 visitors are anticipated to attend Type 2 Special Event and would park in one of the four off-site parking lots and use shuttles to access the project site. Assuming a capacity of 50 passengers per shuttle, approximately 12 shuttles would make four trips each to transport over 2,000 visitors to the site from off-site parking lots. This would result in 96 daily trips, 48 inbound trips and 48 outbound trips during the same hour. All trips were assumed to occur in the AM peak hour and PM peak hour, although shuttle service maybe operate over the entire duration of the special event. These trips are included in the on-site trip generation.
12 A maximum of 2,000 visitors are anticipated to attend Type 2 Special Event. Assuming 50% of the visitors would carpool, 2,000 visitors would result in 1,000 inbound car trips. All visitor trips were assumed to arrive in the AM peak hour and depart in the PM peak hour. The visitors would not stay on-site. The 1,000 visitor cars are expected to use the four off-site parking lots that have been identified in the vicinity of the project. Therefore, these trips are not included in the on-site trip generation.
13 A small number of delivery trips were conservatively assumed to occur on a daily basis. No trips were assumed to occur during the peak hour.

Source: Dudek, City of Dharma Realm Trip Generation, 2024

The non-residential vehicle trip lengths were assumed to be CalEEMod default trip lengths of 8.68 miles for home-work trips, 10.13 miles for work to other trips; and 9.49 miles for other-other trips. A home-work trip represents trips traveling in either direction between home and work locations. A work to other trip is made by an employee traveling in either direction between a work location and all other locations that are not home. An other to other trip is made by a person traveling in either direction between land uses that do not involve home or work locations. Delivery trucks and shuttle buses used the CalEEMod default of 20 miles associated with haul trips.

Vehicle emissions occur during startup, operation (running), and idling, as well as from evaporative losses when the engines are resting. The emissions factors for motor vehicles were determined using CalEEMod defaults.

Fleet Mix

The default CalEEMod fleet mix was revised to more accurately reflect the vehicles that would access the project site during the typical day, Type 1 Special Events, and Type 2 Special Events. Table 4 provides a summary of the revised fleet mix.

Table 4. Fleet Mix

Type	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS	Total
Percentage														
Default	1.59	44.01	4.46	22.67	4.15	0.90	2.88	16.72	0.31	2.02	0.09	0.09	0.10	100
Visitors, Employees Residents	0	50.09	5.08	25.80	0	0	0	19.03	0	0	0	0	0	100
Deliveries	18.32	0	0	0	47.95	10.44	0	0	0	23.28	0	0	0	100
Shuttles	0	0	0	0	0	0	0	0	0	0	0	0	100	100

Area Sources

CalEEMod was used to estimate operational emissions from area sources, including emissions from consumer product use, architectural coatings, and landscape maintenance equipment. Emissions associated with

natural gas usage in space heating and water heating are calculated in the building energy use module of CalEEMod, as described in the following text.

Consumer products are chemically formulated products used by household and institutional consumers, including detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. Other paint products, furniture coatings, or architectural coatings are not considered consumer products (CAPCOA 2022). Consumer product VOC emissions are estimated in CalEEMod based on the floor area of residential and nonresidential buildings and on the default factor of pounds of VOC per building square foot per day. For the asphalt surface land use, CalEEMod estimates VOC emissions associated with use of parking surface degreasers based on a square footage of parking surface area and pounds of VOC per square foot per day.

ROG off-gassing emissions result from evaporation of solvents contained in surface coatings such as in paints and primers used during building maintenance. CalEEMod calculates the ROG evaporative emissions from application of nonresidential and residential surface coatings based on the ROG emission factor, the building square footage, the assumed fraction of surface area, and the reapplication rate. The CalEEMod default ROG emission factors were used for building interior, exterior, and parking area coatings. The model default reapplication rate of 10% of area per year is assumed.

Landscape maintenance includes fuel combustion emissions from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers. The emissions associated from landscape equipment use are estimated based on CalEEMod default values for emission factors (grams per residential dwelling unit per day and grams per square foot of nonresidential building space per day) and number of summer days (when landscape maintenance would generally be performed) and winter days. The CalEEMod default of 180 summer days was assumed.

Energy Sources

As represented in CalEEMod, energy sources include emissions associated with building electricity and natural gas usage (non-hearth). Electricity use would contribute indirectly to criteria air pollutant emissions; however, the emissions from electricity use are only quantified for GHGs in CalEEMod, because criteria pollutant emissions occur at the site of the power plant, which is typically off-site. Therefore, for the purposes of the air quality analysis, the energy source parameters focus on criteria air pollutants generated because of natural gas consumption within the built environment. Natural gas consumption is attributed to systems like heating, ventilation, air conditioning and water heating.

3.3 Construction Health Risk Assessment

A construction health risk assessment (HRA) was performed to evaluate potential health risk associated with construction of the project. The following discussion summarizes the dispersion modeling and HRA methodology; supporting construction HRA documentation, including detailed assumptions, is presented in Attachment B.

For risk assessment purposes, PM_{10} in diesel exhaust is considered DPM, originating mainly from off-road equipment operating at a defined location for a given length of time at a given distance from sensitive receptors. Less-intensive, more-dispersed emissions result from on road vehicle exhaust (e.g., heavy-duty diesel trucks). For

the construction HRA, the CalEEMod scenario for the project was adjusted to reduce diesel truck one-way trip distances to 1,320 feet (0.25 miles) (SJVAPCD 2018) to estimate emissions from truck pass-by at proximate receptors. Air dispersion modeling was performed using the EPA's American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 22112 modeling system (computer software) with the Lakes Environmental Software implementation/user interface, AERMOD View Version 12.0.0. The HRA followed the Office of Environmental Health Hazard Assessment (OEHHA) 2015 guidelines (OEHHA 2015) guidance to calculate the health risk impacts at all proximate receptors as further discussed below. The dispersion modeling included the use of standard regulatory default options. AERMOD parameters were selected consistent with the YSAQMD, OEHHA, and EPA guidance and identified as representative of the project site and project activities. For the project, AERMOD was run with all sources emitting unit emissions (one gram per second) to obtain the "X/Q" values. X/Q is a dispersion factor that is the average effluent concentration normalized by source strength and is used as a way to simplify the representation of emissions from many sources. The X/Q values of ground-level concentrations were determined for construction emissions using AERMOD and the maximum concentrations determined for the one-hour and period-averaging periods.

Principal parameters of this modeling are presented in Table 5.

Table 5. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Meteorological Data	Representative meteorological data set for the project site was obtained from CARB for YSAQMD. The YSAQMD meteorological dataset came from the Nut Tree Airport located at 301 County Airport Road, Vacaville, approximately 28 miles southwest from the project site. The latest five-year data set from the Nut Tree Airport station was for the 2017-2021 years.
Urban versus Rural Option	Urban dispersion option was selected due to the developed nature of the project site. Urban dispersion was used based on the land use/population density procedure described in Section 4.4.1 of the OEHHA Guidance Manual (OEHHA 2015).
Terrain Characteristics	Digital elevation model files were imported into AERMOD so that complex terrain features were evaluated as appropriate for the site. This accounts for complex terrain within 2 kilometers of the site. The National Elevation Dataset (NED) dataset with resolution of 1 arc-second was used. The AERMAP terrain preprocessor, which can process U.S. Geological Survey (USGS) Digital Elevation Model (DEM) data and data from the NED, is also used to generate the terrain elevations for the receptor locations. The AERMAP program generates an output file that contains the receptor pathway data for AERMOD.
Source Release Characterizations	Air dispersion modeling of DPM emissions was conducted assuming the off-road equipment would operate in accordance with the modeling scenario estimated in CalEEMod (Attachment A). The construction equipment and on-site truck travel DPM emissions were modeled as a line of adjacent volume sources across the project site to represent project construction with a release height of 5 meters, plume height of 10 meters, and plume width of 10 meters (SCAQMD 2008).

Table 5. American Meteorological Society/Environmental Protection Agency Regulatory Model Principal Parameters

Parameter	Details
Receptors	The HRA evaluates the risk to existing off-site and on-site sensitive receptors located in proximity to the project site. For the off-site receptors, the construction scenario used a 2-kilometer by 2-kilometer Cartesian receptor grid with less than 50-meter spacing to establish the impact area and evaluate locations of maximum health risk impact. Discrete receptors were placed over residential receptors in closest proximity to the site. On-site receptors were placed at buildings at ground level.

Source: See Attachment B.
Notes: AERMOD = American Meteorological Society/Environmental Protection Agency Regulatory Model; PCAPCD= Placer County Air Pollution Control District; SCAQMD = South Coast Air Quality Management District; SJVAPCD = San Joaquin Valley Air Pollution Control District; EPA = U.S. Environmental Protection Agency; OEHHA = Office of Environmental Health Hazard Assessment.

The health risk calculations were performed using the Hotspots Analysis and Reporting Program Version 2 (HARP2) Air Dispersion and Risk Tool (ADMRT, Version 22118), which requires peak one-hour emission rates and annual emission rates for all pollutants for each modeling source. For the offsite residential health risk, the HRA assumes exposure would start in the third trimester of pregnancy for a duration of 32 months. For the onsite residents, the HRA assumes exposure would start as an adult for a duration of 32 months. A construction HRA CalEEMod run was performed to estimate on-site emissions of exhaust PM_{10}, which was used as a surrogate for DPM.[2] The predominant source of construction exhaust PM_{10} is operation of off-road diesel construction equipment. However, it was conservatively assumed that emissions from heavy-duty haul and vendor trucks, which could be diesel- or gasoline-fueled, traveling 0.25 miles would occur on site to represent potential on-site travel and nearby local off-site travel. Total exhaust PM_{10} emissions from CalEEMod were averaged over the project's construction duration to estimate the annual and hourly exposure, which were estimated to be approximately 155 pounds per year and 0.07 pounds per hour of DPM for offsite receptors.

AERMOD was run with all sources emitting unit emissions (1 gram per second) to obtain the necessary input values for HARP2. The line of volume sources was partitioned evenly based on the 1 gram per second emission rate. The ground-level concentration plot files were then used to estimate the long-term cancer health risk to an individual, and the non-cancer chronic health indices. There is no reference exposure level for acute health impacts from DPM, and, thus, acute risk was not evaluated.

3.4 Energy Calculations

CalEEMod Version 2022 (CAPCOA 2022) was used to estimate the potential project-energy consumption during construction and operation. Construction of the project would result in petroleum consumption primarily associated with use of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles. All details specific to construction and operation are discussed in Section 3.2 and 3.3 above are also applicable for the estimation of construction-related and operations-related energy consumption.

[2] Under California regulatory guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust as a whole. The California Environmental Protection Agency has concluded that "potential cancer risk from inhalation exposure to whole diesel exhaust will outweigh the multi-pathway cancer risk from the speciated components" (OEHHA 2003).

Fuel consumption from construction equipment was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline or diesel. The conversion factor for gasoline is 8.78 kilograms per metric ton of CO_2 per gallon, and the conversion factor for diesel is 10.21 kilograms per metric ton of CO_2 per gallon (TCR 2023).

3.5 Greenhouse Gas Significance Threshold

California has developed guidelines to address the significance of GHG emissions impacts that are contained in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.). Appendix G provides that a project would have a significant environmental impact if it would:

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

The Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). Additional guidance regarding assessment of GHGs is discussed below.

Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. There are currently no established thresholds for assessing whether the GHG emissions of a project, such as the Project, would be considered a cumulatively considerable contribution to global climate change; however, all reasonable efforts should be made to minimize a project's contribution to global climate change. In addition, while GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008), GHG emissions impacts must also be evaluated on a project-level under CEQA.

CEQA Guidelines

With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or performance-based standards" (14 CCR 15064.4[a]). A lead agency may use a "model or methodology" to estimate greenhouse gas emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change" (14 CCR 15064.4[c]). The CEQA Guidelines provide that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment (14 CCR 15064.4[b]):

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. 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.

In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

The extent to which a project increases or decreases GHG emissions in the existing environmental setting should be estimated in accordance with Section 15064.4, *Determining the Significance of Impacts from Greenhouse Gas Emissions*, of the State CEQA Guidelines. The State CEQA Guidelines indicate that when calculating GHG emissions resulting from a project, lead agencies shall make a good-faith effort based on scientific and factual data (Section 15064.4 (a)), and lead agencies have discretion to select the model or methodology deemed most appropriate for enabling decision makers to intelligently assess the project's incremental contribution to climate change (Section 15064.4 (c)).

The State CEQA Guidelines do not indicate an amount of GHG emissions that constitutes a significant impact on the environment. Instead, they authorize the lead agency to consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence (State CEQA Guidelines Sections 15064.4(a) and 15064.7(c)). Several agencies throughout the state have drafted and/or adopted numerical threshold approaches and guidelines for analyzing the significance of project-related GHG emissions; however, no numerical thresholds have been formally adopted by an air district or lead agency for use in the San Diego region.

Governor's Office of Planning and Research Guidance

The Governor's Office of Planning and Research's Technical Advisory, titled Discussion Draft CEQA and Climate Change Advisory (OPR 2018), states the following:

> [N]either the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for performing an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. … Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact.

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Approach to Determining Significance

The City's Climate Action Plan (CAP) has not been adopted as such it is not eligible for tiering under CEQA Guideline 15183.5.

The Yolo-Solano Air Quality Management District (YSAQMD) and a committee of air districts in the Sacramento Region[3], have developed draft thresholds for evaluating GHG emissions from new stationary sources and land development projects. The goal of the thresholds is to capture at least 90% of GHG emissions from new stationary sources and land development projects. The Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted the mass emissions thresholds in October 2014. Placer County Air Pollution Control District (PCAPCD) adopted its thresholds in 2016.

Given that neither the City nor YSAQMD has not adopted a GHG threshold of significance, a review of adopted thresholds within the Sacramento Region was conducted to determine numeric thresholds that would be appropriate.

The SMAQMD established an 1,100 MT CO_2e threshold for construction emissions and operational emissions with incorporation of Best Management Practices (BMPs), which includes projects being designed and constructed with no natural gas infrastructure and meeting the current CalGreen Tier 2 standards for electric vehicle readiness. SMAQMD also determined that certain projects had *De Minimis* mobile GHG impacts, such as projects that generate less than 110 trips per day.

PACPD established a tiered GHG threshold that consists of 1) Bright - line Threshold of 10,000 MT CO_2e per year for the construction and operational phases of land use projects as well as the stationary source projects; 2) Efficiency Matrix for the operational phase of land use development projects when emissions exceed the *De Minimis* Level, and 3) *De Minimis* Level for the operational phases of 1,100 MT CO_2e per year.

Notably, for both SMAQMD and PCAPCD, the 1,100 MT CO_2e thresholds were based on capturing the projects for generating over 90% of GHG emissions.

Based on the project area being located within the same Sacramento Region as SMAQMD and PCAPCD, it is reasonable to apply the same 1,100 MT CO_2e threshold to determine if GHG emissions would be cumulatively considerable.

The applicable GHG reduction plans that would apply to the project include the Sacramento Area Council of Governments (SACOG) 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS), which was adopted in November 2019. SACOG is currently developing the 2025 Blueprint, which is anticipated to be finalized in early 2025.

The California Air Resources Board's (CARB) Scoping Plan would also be applicable to the project.

[3] Air districts in the region include YSAQMD, Sacramento Metropolitan Air Quality Management District, El Dorado County Air Quality Management District, Feather River Air Quality Management District, and Placer County Air Pollution Control District.

4 References

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Attachment A

CalEEMod Output Files

CDR Temple Construction Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CDR Temple Construction
Construction Start Date	6/2/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.00
Location	1029 W Capitol Ave, West Sacramento, CA 95691, USA
County	Yolo
City	West Sacramento
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	313
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Place of Worship	99.4	1000sqft	2.28	99,414	9,000	—	—	—

Parking Lot	175	Space	1.58	0.00	6,000	—	—	—
Other Asphalt Surfaces	1.47	Acre	1.47	0.00	0.00	—	—	—
Place of Worship	19.6	1000sqft	0.45	19,620	0.00	—	—	—
Road Widening	0.10	Mile	0.50	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.84	7.45	69.1	72.1	0.20	2.89	24.0	26.9	2.66	10.7	13.3	—	27,562	27,562	1.24	2.69	38.4	28,434
Mit.	8.84	7.45	69.1	72.1	0.20	2.89	9.76	12.6	2.66	4.25	6.91	—	27,562	27,562	1.24	2.69	38.4	28,434
% Reduced	—	—	—	—	—	—	59%	53%	—	60%	48%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.96	37.7	28.8	36.7	0.07	1.13	2.54	3.67	1.04	0.40	1.44	—	7,882	7,882	0.30	0.18	0.13	7,943
Mit.	3.96	37.7	28.8	36.7	0.07	1.13	1.57	2.70	1.04	0.30	1.34	—	7,882	7,882	0.30	0.18	0.13	7,943
% Reduced	—	—	—	—	—	—	38%	26%	—	26%	7%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.08	2.07	15.6	17.9	0.03	0.65	3.06	3.70	0.59	1.13	1.72	—	3,961	3,961	0.16	0.12	1.06	4,002
Mit.	2.08	2.07	15.6	17.9	0.03	0.65	1.46	2.10	0.59	0.50	1.10	—	3,961	3,961	0.16	0.12	1.06	4,002
% Reduced	—	—	—	—	—	—	52%	43%	—	55%	36%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38	0.38	2.84	3.26	0.01	0.12	0.56	0.68	0.11	0.21	0.31	—	656	656	0.03	0.02	0.18	663
Mit.	0.38	0.38	2.84	3.26	0.01	0.12	0.27	0.38	0.11	0.09	0.20	—	656	656	0.03	0.02	0.18	663
% Reduced	—	—	—	—	—	—	52%	43%	—	55%	36%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	80.0	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Mit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	80.0	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Mit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

Mit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.84	7.45	69.1	72.1	0.20	2.89	24.0	26.9	2.66	10.7	13.3	—	27,562	27,562	1.24	2.69	38.4	28,434
2026	1.54	1.29	10.6	16.0	0.03	0.39	0.65	1.04	0.36	0.16	0.52	—	3,495	3,495	0.12	0.12	3.33	3,538
2027	1.46	1.24	10.2	15.8	0.03	0.34	0.65	1.00	0.32	0.16	0.48	—	3,474	3,474	0.12	0.12	3.01	3,516
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.96	3.32	28.8	36.7	0.07	1.13	2.54	3.67	1.04	0.40	1.44	—	7,882	7,882	0.30	0.18	0.13	7,943
2026	1.50	1.27	10.8	15.3	0.03	0.39	0.65	1.04	0.36	0.16	0.52	—	3,435	3,435	0.13	0.12	0.09	3,476
2027	1.44	1.20	10.2	15.2	0.03	0.34	0.65	1.00	0.32	0.16	0.48	—	3,416	3,416	0.12	0.12	0.08	3,455
2028	1.39	37.7	9.74	15.0	0.03	0.31	0.65	0.96	0.28	0.16	0.44	—	3,394	3,394	0.12	0.12	0.07	3,433
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.08	1.73	15.6	17.9	0.03	0.65	3.06	3.70	0.59	1.13	1.72	—	3,961	3,961	0.16	0.12	1.06	4,002
2026	1.07	0.91	7.66	11.0	0.02	0.28	0.46	0.74	0.25	0.11	0.37	—	2,463	2,463	0.09	0.09	1.03	2,492
2027	1.03	0.86	7.29	10.9	0.02	0.25	0.46	0.71	0.23	0.11	0.34	—	2,449	2,449	0.09	0.09	0.93	2,477
2028	0.06	2.07	0.44	0.70	< 0.005	0.02	0.02	0.04	0.01	< 0.005	0.02	—	122	122	< 0.005	< 0.005	0.03	123
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.38	0.32	2.84	3.26	0.01	0.12	0.56	0.68	0.11	0.21	0.31	—	656	656	0.03	0.02	0.18	663
2026	0.20	0.17	1.40	2.00	< 0.005	0.05	0.08	0.14	0.05	0.02	0.07	—	408	408	0.01	0.01	0.17	413
2027	0.19	0.16	1.33	1.98	< 0.005	0.04	0.08	0.13	0.04	0.02	0.06	—	405	405	0.01	0.01	0.15	410
2028	0.01	0.38	0.08	0.13	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	20.2	20.2	< 0.005	< 0.005	0.01	20.4

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.84	7.45	69.1	72.1	0.20	2.89	9.76	12.6	2.66	4.25	6.91	—	27,562	27,562	1.24	2.69	38.4	28,434
2026	1.54	1.29	10.6	16.0	0.03	0.39	0.65	1.04	0.36	0.16	0.52	—	3,495	3,495	0.12	0.12	3.33	3,538
2027	1.46	1.24	10.2	15.8	0.03	0.34	0.65	1.00	0.32	0.16	0.48	—	3,474	3,474	0.12	0.12	3.01	3,516
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.96	3.32	28.8	36.7	0.07	1.13	1.57	2.70	1.04	0.30	1.34	—	7,882	7,882	0.30	0.18	0.13	7,943
2026	1.50	1.27	10.8	15.3	0.03	0.39	0.65	1.04	0.36	0.16	0.52	—	3,435	3,435	0.13	0.12	0.09	3,476
2027	1.44	1.20	10.2	15.2	0.03	0.34	0.65	1.00	0.32	0.16	0.48	—	3,416	3,416	0.12	0.12	0.08	3,455
2028	1.39	37.7	9.74	15.0	0.03	0.31	0.65	0.96	0.28	0.16	0.44	—	3,394	3,394	0.12	0.12	0.07	3,433
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.08	1.73	15.6	17.9	0.03	0.65	1.46	2.10	0.59	0.50	1.10	—	3,961	3,961	0.16	0.12	1.06	4,002
2026	1.07	0.91	7.66	11.0	0.02	0.28	0.46	0.74	0.25	0.11	0.37	—	2,463	2,463	0.09	0.09	1.03	2,492
2027	1.03	0.86	7.29	10.9	0.02	0.25	0.46	0.71	0.23	0.11	0.34	—	2,449	2,449	0.09	0.09	0.93	2,477
2028	0.06	2.07	0.44	0.70	< 0.005	0.02	0.02	0.04	0.01	< 0.005	0.02	—	122	122	< 0.005	< 0.005	0.03	123
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.38	0.32	2.84	3.26	0.01	0.12	0.27	0.38	0.11	0.09	0.20	—	656	656	0.03	0.02	0.18	663
2026	0.20	0.17	1.40	2.00	< 0.005	0.05	0.08	0.14	0.05	0.02	0.07	—	408	408	0.01	0.01	0.17	413
2027	0.19	0.16	1.33	1.98	< 0.005	0.04	0.08	0.13	0.04	0.02	0.06	—	405	405	0.01	0.01	0.15	410
2028	0.01	0.38	0.08	0.13	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	20.2	20.2	< 0.005	< 0.005	0.01	20.4

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.45	0.45	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.03	0.01	0.53	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	427	427	0.02	0.07	0.94	449
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.02	24.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.07

3.2. Demolition (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.45	0.45	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.03	0.01	0.53	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	427	427	0.02	0.07	0.94	449

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.4	23.4	< 0.005	< 0.005	0.02	24.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.87	3.87	< 0.005	< 0.005	< 0.005	4.07

3.3. Site Preparation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.17	3.50	32.9	31.6	0.05	1.42	—	1.42	1.31	—	1.31	—	5,503	5,503	0.22	0.04	—	5,522
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.80	2.69	< 0.005	0.12	—	0.12	0.11	—	0.11	—	467	467	0.02	< 0.005	—	469
Dust From Material Movement	—	—	—	—	—	—	1.67	1.67	—	0.86	0.86	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.4	77.4	< 0.005	< 0.005	—	77.6
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.45	174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.03	17.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.8

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	0.01	2.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.33	2.33	< 0.005	< 0.005	< 0.005	2.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.17	3.50	32.9	31.6	0.05	1.42	—	1.42	1.31	—	1.31	—	5,503	5,503	0.22	0.04	—	5,522
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.80	2.69	< 0.005	0.12	—	0.12	0.11	—	0.11	—	467	467	0.02	< 0.005	—	469
Dust From Material Movement	—	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.4	77.4	< 0.005	< 0.005	—	77.6
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.45	174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.6	17.6	< 0.005	< 0.005	0.03	17.8
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.1	14.1	< 0.005	< 0.005	0.02	14.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.91	2.91	< 0.005	< 0.005	0.01	2.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.33	2.33	< 0.005	< 0.005	< 0.005	2.44
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.20	7.20	—	3.44	3.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.45	174
Hauling	1.16	0.35	19.9	6.98	0.10	0.30	4.09	4.39	0.20	1.15	1.35	—	16,081	16,081	0.79	2.55	35.3	16,896
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	0.01	4.59
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.63	3.63	< 0.005	< 0.005	< 0.005	3.81
Hauling	0.03	0.01	0.46	0.15	< 0.005	0.01	0.09	0.10	< 0.005	0.03	0.03	—	353	353	0.02	0.06	0.33	370
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.76
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.63
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	58.4	58.4	< 0.005	0.01	0.06	61.2

3.6. Grading (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.81	2.81	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.20	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	226	226	< 0.005	0.01	0.86	229
Vendor	0.01	0.01	0.21	0.08	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.45	174
Hauling	1.16	0.35	19.9	6.98	0.10	0.30	4.09	4.39	0.20	1.15	1.35	—	16,081	16,081	0.79	2.55	35.3	16,896
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	0.01	4.59
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.63	3.63	< 0.005	< 0.005	< 0.005	3.81
Hauling	0.03	0.01	0.46	0.15	< 0.005	0.01	0.09	0.10	< 0.005	0.03	0.03	—	353	353	0.02	0.06	0.33	370
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.76
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.60	0.60	< 0.005	< 0.005	< 0.005	0.63
Hauling	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	58.4	58.4	< 0.005	0.01	0.06	61.2

3.7. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.64	3.29	0.01	0.11	—	0.11	0.10	—	0.10	—	605	605	0.02	< 0.005	—	607
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.48	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.15	3.00	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	565	565	0.01	0.02	2.16	573
Vendor	0.04	0.02	0.69	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	553	553	0.02	0.09	1.50	580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.20	2.25	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	504	504	0.01	0.02	0.06	510
Vendor	0.04	0.02	0.74	0.27	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	553	553	0.02	0.09	0.04	579
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.05	0.04	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	< 0.005	0.01	0.24	132
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.16	146
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.64	3.29	0.01	0.11	—	0.11	0.10	—	0.10	—	605	605	0.02	< 0.005	—	607

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.48	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.15	3.00	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	565	565	0.01	0.02	2.16	573
Vendor	0.04	0.02	0.69	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	553	553	0.02	0.09	1.50	580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.19	0.20	2.25	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	504	504	0.01	0.02	0.06	510
Vendor	0.04	0.02	0.74	0.27	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	553	553	0.02	0.09	0.04	579
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.58	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	< 0.005	0.01	0.24	132
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	0.16	146
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.04	21.9
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23.1	23.1	< 0.005	< 0.005	0.03	24.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.13	2.80	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	554	554	0.01	0.02	1.97	562
Vendor	0.04	0.02	0.67	0.25	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	543	543	0.02	0.09	1.36	570
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.18	2.10	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	494	494	0.01	0.02	0.05	501
Vendor	0.04	0.02	0.72	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.02	0.09	0.04	569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.52	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	362	362	0.01	0.01	0.61	367
Vendor	0.03	0.01	0.50	0.18	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	388	388	0.01	0.06	0.42	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.10	60.8
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.3	64.3	< 0.005	0.01	0.07	67.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.13	2.80	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	554	554	0.01	0.02	1.97	562
Vendor	0.04	0.02	0.67	0.25	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	543	543	0.02	0.09	1.36	570
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.18	0.18	2.10	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	494	494	0.01	0.02	0.05	501

Vendor	0.04	0.02	0.72	0.26	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	544	544	0.02	0.09	0.04	569
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.52	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	362	362	0.01	0.01	0.61	367
Vendor	0.03	0.01	0.50	0.18	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	388	388	0.01	0.06	0.42	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.10	60.8
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.3	64.3	< 0.005	0.01	0.07	67.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.19	0.13	2.64	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	545	545	0.01	0.02	1.80	552
Vendor	0.03	0.02	0.64	0.24	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	533	533	0.02	0.08	1.21	558
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.16	1.98	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	486	486	0.01	0.02	0.05	492
Vendor	0.03	0.02	0.69	0.25	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	533	533	0.02	0.08	0.03	558
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.10	1.44	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	356	356	0.01	0.01	0.55	361
Vendor	0.02	0.01	0.48	0.17	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	381	381	0.01	0.06	0.37	398
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	58.9	58.9	< 0.005	< 0.005	0.09	59.8

Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.0	63.0	< 0.005	0.01	0.06	66.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20	0.19	0.13	2.64	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	545	545	0.01	0.02	1.80	552
Vendor	0.03	0.02	0.64	0.24	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	533	533	0.02	0.08	1.21	558
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.16	1.98	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	486	486	0.01	0.02	0.05	492
Vendor	0.03	0.02	0.69	0.25	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	533	533	0.02	0.08	0.03	558
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.10	1.44	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	356	356	0.01	0.01	0.55	361
Vendor	0.02	0.01	0.48	0.17	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	381	381	0.01	0.06	0.37	398
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	58.9	58.9	< 0.005	< 0.005	0.09	59.8
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.0	63.0	< 0.005	0.01	0.06	66.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.33	2.33	< 0.005	< 0.005	—	2.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.15	1.87	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	476	476	0.01	0.02	0.04	483
Vendor	0.03	0.02	0.66	0.24	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.04	—	521	521	0.02	0.08	0.03	545
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.87	2.87	< 0.005	< 0.005	< 0.005	2.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.06	3.06	< 0.005	< 0.005	< 0.005	3.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.33	2.33	< 0.005	< 0.005	—	2.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.15	1.87	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	476	476	0.01	0.02	0.04	483
Vendor	0.03	0.02	0.66	0.24	< 0.005	0.01	0.15	0.16	< 0.005	0.04	0.04	—	521	521	0.02	0.08	0.03	545
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.87	2.87	< 0.005	< 0.005	< 0.005	2.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.06	3.06	< 0.005	< 0.005	< 0.005	3.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516

Paving	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.5	74.5	< 0.005	< 0.005	—	74.8
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.02	193
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.1	52.1	< 0.005	0.01	< 0.005	54.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.64	9.64	< 0.005	< 0.005	0.01	9.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.57	2.57	< 0.005	< 0.005	< 0.005	2.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.45
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.5	74.5	< 0.005	< 0.005	—	74.8
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	191	191	< 0.005	0.01	0.02	193
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.1	52.1	< 0.005	0.01	< 0.005	54.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.64	9.64	< 0.005	< 0.005	0.01	9.77
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.57	2.57	< 0.005	< 0.005	< 0.005	2.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.45
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	36.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.01	96.5

Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.1	52.1	< 0.005	0.01	< 0.005	54.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.35	5.35	< 0.005	< 0.005	0.01	5.43
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.99
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.49
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	36.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.37	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.01	96.5
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	52.1	52.1	< 0.005	0.01	< 0.005	54.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.35	5.35	< 0.005	< 0.005	0.01	5.43
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.99
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.89	0.89	< 0.005	< 0.005	< 0.005	0.90

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.49
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Linear, Grubbing & Land Clearing (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.53	4.58	4.81	0.01	0.25	—	0.25	0.23	—	0.23	—	681	681	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.3	24.3	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.02	4.02	< 0.005	< 0.005	—	4.03
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	113	113	< 0.005	< 0.005	0.43	115
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.68	3.68	< 0.005	< 0.005	0.01	3.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	2.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Linear, Grubbing & Land Clearing (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.53	4.58	4.81	0.01	0.25	—	0.25	0.23	—	0.23	—	681	681	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.3	24.3	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.02	4.02	< 0.005	< 0.005	—	4.03
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.60	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	113	113	< 0.005	< 0.005	0.43	115
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.68	3.68	< 0.005	< 0.005	0.01	3.73
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	2.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Linear, Grading & Excavation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.39	3.69	32.6	36.9	0.07	1.46	—	1.46	1.35	—	1.35	—	7,645	7,645	0.31	0.06	—	7,671

Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.26	5.96	0.01	0.24	—	0.24	0.22	—	0.22	—	1,236	1,236	0.05	0.01	—	1,240
Dust From Material Movement	—	—	—	—	—	—	0.60	0.60	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.09	< 0.005	0.04	—	0.04	0.04	—	0.04	—	205	205	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.11	2.28	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	429	429	0.01	0.02	1.64	436
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.5	63.5	< 0.005	< 0.005	0.11	64.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.94	8.94	< 0.005	< 0.005	0.01	9.36
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.48	1.48	< 0.005	< 0.005	< 0.005	1.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Grading & Excavation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.39	3.69	32.6	36.9	0.07	1.46	—	1.46	1.35	—	1.35	—	7,645	7,645	0.31	0.06	—	7,671
Dust From Material Movement	—	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.26	5.96	0.01	0.24	—	0.24	0.22	—	0.22	—	1,236	1,236	0.05	0.01	—	1,240
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.09	< 0.005	0.04	—	0.04	0.04	—	0.04	—	205	205	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.16	0.11	2.28	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	429	429	0.01	0.02	1.64	436
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.5	63.5	< 0.005	< 0.005	0.11	64.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.94	8.94	< 0.005	< 0.005	0.01	9.36

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.02	10.7
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.48	1.48	< 0.005	< 0.005	< 0.005	1.55
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.88	2.18	< 0.005	0.08	—	0.08	0.07	—	0.07	—	448	448	0.02	< 0.005	—	450
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.2	74.2	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	1.68	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	316	316	< 0.005	0.01	1.21	321
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.11	1.26	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	282	282	0.01	0.01	0.03	286
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.7	31.7	< 0.005	< 0.005	0.06	32.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.25	5.25	< 0.005	< 0.005	0.01	5.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104

Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.88	2.18	< 0.005	0.08	—	0.08	0.07	—	0.07	—	448	448	0.02	< 0.005	—	450
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.2	74.2	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.08	1.68	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	316	316	< 0.005	0.01	1.21	321
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	0.11	1.26	0.00	0.00	0.28	0.28	0.00	0.07	0.07	—	282	282	0.01	0.01	0.03	286
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.7	31.7	< 0.005	< 0.005	0.06	32.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.25	5.25	< 0.005	< 0.005	0.01	5.32
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Linear, Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	7.92	11.7	0.02	0.34	—	0.34	0.31	—	0.31	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.43	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.9	96.9	< 0.005	< 0.005	—	97.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Linear, Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	7.92	11.7	0.02	0.34	—	0.34	0.31	—	0.31	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.43	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.9	96.9	< 0.005	< 0.005	—	97.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.08	0.90	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	< 0.005	0.01	0.02	204
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.87	1.87	< 0.005	< 0.005	< 0.005	1.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/2/2025	6/30/2025	5.00	20.0	—
Site Preparation	Site Preparation	7/1/2025	8/12/2025	5.00	31.0	—
Grading	Grading	8/13/2025	8/22/2025	5.00	8.00	—
Building Construction	Building Construction	8/25/2025	1/3/2028	5.00	616	—
Paving	Paving	1/4/2028	1/27/2028	5.00	18.0	—
Architectural Coating	Architectural Coating	1/10/2028	2/4/2028	5.00	20.0	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/20/2025	5.00	13.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	6/21/2025	9/11/2025	5.00	59.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	9/12/2025	11/7/2025	5.00	40.0	—
Linear, Paving	Linear, Paving	11/8/2025	12/6/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Diesel	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41

Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82

Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Diesel	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	2.00	8.80	HHDT,MHDT
Demolition	Hauling	6.00	20.0	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2

Grading	Vendor	6.00	8.80	HHDT,MHDT
Grading	Hauling	226	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.0	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	2.00	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	10.0	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	38.0	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	28.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	2.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	0.00	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	20.0	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	20.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	2.00	8.80	HHDT,MHDT
Demolition	Hauling	6.00	20.0	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	20.0	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	6.00	8.80	HHDT,MHDT

Grading	Hauling	226	20.0	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	50.0	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	2.00	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	10.0	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	10.0	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	38.0	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT

Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	28.0	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	2.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	0.00	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	20.0	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	178,551	59,517	7,971

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	8,900	—
Site Preparation	—	—	46.5	0.00	—
Grading	—	14,436	8.00	0.00	—

Paving	0.00	0.00	0.00	0.00	3.55
Linear, Grubbing & Land Clearing	—	—	0.50	0.00	—
Linear, Grading & Excavation	—	—	0.50	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.50	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Place of Worship	0.00	0%
Parking Lot	1.58	100%
Other Asphalt Surfaces	1.47	100%
Place of Worship	0.00	0%
Road Widening	0.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	88.1	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.1	annual days of extreme heat
Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.94	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6

AQ-PM	37.2
AQ-DPM	92.1
Drinking Water	11.4
Lead Risk Housing	84.7
Pesticides	0.00
Toxic Releases	38.0
Traffic	53.0
Effect Indicators	—
CleanUp Sites	92.3
Groundwater	96.7
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	97.5
Solid Waste	42.3
Sensitive Population	—
Asthma	76.8
Cardio-vascular	77.3
Low Birth Weights	2.66
Socioeconomic Factor Indicators	—
Education	53.1
Housing	22.7
Linguistic	23.8
Poverty	44.9
Unemployment	58.4

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	37.77749262
Employed	59.69459772
Median HI	38.59874246
Education	—
Bachelor's or higher	47.7223149
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—
Auto Access	40.90850764
Active commuting	70.61465418
Social	—
2-parent households	61.01629668
Voting	45.96432696
Neighborhood	—
Alcohol availability	37.62350828
Park access	43.48774541
Retail density	48.67188503
Supermarket access	33.42743488
Tree canopy	87.75824458
Housing	—
Homeownership	51.68741178
Housing habitability	71.48723213
Low-inc homeowner severe housing cost burden	30.65571667
Low-inc renter severe housing cost burden	89.67021686
Uncrowded housing	44.92493263
Health Outcomes	—

Insured adults	44.48864365
Arthritis	0.0
Asthma ER Admissions	29.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	18.9
Cognitively Disabled	20.1
Physically Disabled	21.7
Heart Attack ER Admissions	26.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	97.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	25.4

Elderly	48.0
English Speaking	68.0
Foreign-born	19.8
Outdoor Workers	41.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	44.2
Traffic Density	59.4
Traffic Access	23.0
Other Indices	—
Hardship	52.6
Other Decision Support	—
2016 Voting	1.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant schedule. Building construction length is longer than default.
Construction: Trips and VMT	Adjusted numbers to represent even number of trips.
Operations: Vehicle Data	average of 30 trips per day weekdays and weekends per Traffic Study.
Land Use	Project Description
Construction: Off-Road Equipment	Signal Board default was 0 and electric; adjusted quantity to 1. Added trencher to site preparation.
Construction: On-Road Fugitive Dust	Project is in an urbanized area with paved roads.

CDR Temple Typical Day Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CDR Temple Typical Day
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.00
Location	1029 W Capitol Ave, West Sacramento, CA 95691, USA
County	Yolo
City	West Sacramento
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	313
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Place of Worship	99.4	1000sqft	2.28	99,414	9,000	—	—	—

Parking Lot	175	Space	1.58	0.00	6,000	—	—	—
Other Asphalt Surfaces	1.47	Acre	1.47	0.00	0.00	—	—	—
User Defined Educational	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Employees, Visitors
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Deliveries

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01	3.18	1.37	6.40	0.01	0.10	0.32	0.42	0.09	0.08	0.18	311	2,392	2,703	31.4	0.06	1.78	3,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	2.46	1.36	1.87	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,346	2,657	31.4	0.06	0.42	3,459
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.61	2.81	1.37	3.99	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,361	2,672	31.4	0.06	0.99	3,474

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.51	0.25	0.73	< 0.005	0.02	0.06	0.08	0.02	0.02	0.03	51.5	391	442	5.19	0.01	0.16	575
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.23	1.15	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	440	440	0.01	0.03	1.39	449
Area	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	1.01	3.18	1.37	6.40	0.01	0.10	0.32	0.42	0.09	0.08	0.18	311	2,392	2,703	31.4	0.06	1.78	3,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.26	0.94	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	412	412	0.01	0.03	0.04	420
Area	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	0.23	2.46	1.36	1.87	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,346	2,657	31.4	0.06	0.42	3,459
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.24	0.93	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	418	418	0.01	0.03	0.60	427
Area	0.38	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	0.61	2.81	1.37	3.99	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,361	2,672	31.4	0.06	0.99	3,474
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.02	0.04	0.17	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	69.2	69.2	< 0.005	< 0.005	0.10	70.6
Area	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

Total	0.11	0.51	0.25	0.73	< 0.005	0.02	0.06	0.08	0.02	0.02	0.03	51.5	391	442	5.19	0.01	0.16	575

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.23	1.15	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	440	440	0.01	0.03	1.39	449
Area	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	1.01	3.18	1.37	6.40	0.01	0.10	0.32	0.42	0.09	0.08	0.18	311	2,392	2,703	31.4	0.06	1.78	3,505
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.26	0.94	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	412	412	0.01	0.03	0.04	420
Area	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	0.23	2.46	1.36	1.87	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,346	2,657	31.4	0.06	0.42	3,459
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.11	0.10	0.24	0.93	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	418	418	0.01	0.03	0.60	427
Area	0.38	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80

Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	0.61	2.81	1.37	3.99	0.01	0.09	0.32	0.41	0.09	0.08	0.17	311	2,361	2,672	31.4	0.06	0.99	3,474
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.02	0.02	0.04	0.17	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	69.2	69.2	< 0.005	< 0.005	0.10	70.6
Area	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.11	0.51	0.25	0.73	< 0.005	0.02	0.06	0.08	0.02	0.02	0.03	51.5	391	442	5.19	0.01	0.16	575

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.10	0.09	0.05	1.03	< 0.005	< 0.005	0.25	0.26	< 0.005	0.06	0.07	—	269	269	0.01	0.01	0.70	271
User Defined Commercial	0.02	0.01	0.18	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.69	178
Total	0.11	0.10	0.23	1.15	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	440	440	0.01	0.03	1.39	449
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.09	0.08	0.06	0.82	< 0.005	< 0.005	0.25	0.26	< 0.005	0.06	0.07	—	241	241	0.01	0.01	0.02	243
User Defined Commercial	0.02	0.01	0.19	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.02	177
Total	0.11	0.10	0.26	0.94	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	412	412	0.01	0.03	0.04	420
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Educational	0.02	0.02	0.01	0.15	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.05	41.3
User Defined Commercial	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.05	29.4
Total	0.02	0.02	0.04	0.17	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	69.2	69.2	< 0.005	< 0.005	0.10	70.6

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.10	0.09	0.05	1.03	< 0.005	< 0.005	0.25	0.26	< 0.005	0.06	0.07	—	269	269	0.01	0.01	0.70	271
User Defined Commercial	0.02	0.01	0.18	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.69	178
Total	0.11	0.10	0.23	1.15	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	440	440	0.01	0.03	1.39	449
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.09	0.08	0.06	0.82	< 0.005	< 0.005	0.25	0.26	< 0.005	0.06	0.07	—	241	241	0.01	0.01	0.02	243
User Defined Commercial	0.02	0.01	0.19	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.02	177
Total	0.11	0.10	0.26	0.94	< 0.005	< 0.005	0.32	0.33	< 0.005	0.08	0.09	—	412	412	0.01	0.03	0.04	420
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.02	0.02	0.01	0.15	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	40.9	40.9	< 0.005	< 0.005	0.05	41.3
User Defined Commercial	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.05	29.4
Total	0.02	0.02	0.04	0.17	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	69.2	69.2	< 0.005	< 0.005	0.10	70.6

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Total	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Total	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.8.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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

4.9.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetatio	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	38.0	38.0	38.0	13,870	364	364	364	132,947
User Defined Commercial	4.00	4.00	4.00	1,460	80.0	80.0	80.0	29,200

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	38.0	38.0	38.0	13,870	364	364	364	132,947
User Defined Commercial	4.00	4.00	4.00	1,460	80.0	80.0	80.0	29,200

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	149,121	49,707	7,971

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value

Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00
User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00
User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.1	annual days of extreme heat

Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.94	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	37.2
AQ-DPM	92.1
Drinking Water	11.4
Lead Risk Housing	84.7
Pesticides	0.00

Toxic Releases	38.0
Traffic	53.0
Effect Indicators	—
CleanUp Sites	92.3
Groundwater	96.7
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	97.5
Solid Waste	42.3
Sensitive Population	—
Asthma	76.8
Cardio-vascular	77.3
Low Birth Weights	2.66
Socioeconomic Factor Indicators	—
Education	53.1
Housing	22.7
Linguistic	23.8
Poverty	44.9
Unemployment	58.4

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.77749262
Employed	59.69459772
Median HI	38.59874246
Education	—

Bachelor's or higher	47.7223149
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—
Auto Access	40.90850764
Active commuting	70.61465418
Social	—
2-parent households	61.01629668
Voting	45.96432696
Neighborhood	—
Alcohol availability	37.62350828
Park access	43.48774541
Retail density	48.67188503
Supermarket access	33.42743488
Tree canopy	87.75824458
Housing	—
Homeownership	51.68741178
Housing habitability	71.48723213
Low-inc homeowner severe housing cost burden	30.65571667
Low-inc renter severe housing cost burden	89.67021686
Uncrowded housing	44.92493263
Health Outcomes	—
Insured adults	44.48864365
Arthritis	0.0
Asthma ER Admissions	29.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	18.9
Cognitively Disabled	20.1
Physically Disabled	21.7
Heart Attack ER Admissions	26.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	97.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	25.4
Elderly	48.0
English Speaking	68.0
Foreign-born	19.8
Outdoor Workers	41.4
Climate Change Adaptive Capacity	—

Impervious Surface Cover	44.2
Traffic Density	59.4
Traffic Access	23.0
Other Indices	—
Hardship	52.6
Other Decision Support	—
2016 Voting	1.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Construction: Construction Phases	Based on applicant schedule. Building construction length is longer than default.
Construction: Trips and VMT	Adjusted numbers to represent even number of trips.
Operations: Vehicle Data	Typical Day has 38 passenger vehicle trips per day and 4 truck trips per day.
Land Use	Project Description. User Defined Educational = Employees, Visitors User Defined Commercial = Deliveries
Construction: Off-Road Equipment	Signal Board default was 0 and electric; adjusted quantity to 1. Added trencher to site preparation.
Construction: On-Road Fugitive Dust	Project is in an urbanized area with paved roads.
Operations: Fleet Mix	Revised Fleet Mix to reflect trip generation characteristics for Employee, Visitor, and Delivery Trips.
Operations: Road Dust	Project is in an urban area.

CDR Temple Type 1 Special Event Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CDR Temple Type 1 Special Event
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.00
Location	1029 W Capitol Ave, West Sacramento, CA 95691, USA
County	Yolo
City	West Sacramento
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	313
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Place of Worship	99.4	1000sqft	2.28	99,414	9,000	—	—	—
Parking Lot	175	Space	1.58	0.00	6,000	—	—	—

Other Asphalt Surfaces	1.47	Acre	1.47	0.00	0.00	—	—	—
User Defined Educational	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Employees, Visitors
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Deliveries

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.48	3.34	1.46	8.22	0.02	0.10	0.77	0.87	0.10	0.20	0.29	311	2,865	3,176	31.4	0.07	3.01	3,983
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.69	2.61	1.47	3.32	0.01	0.09	0.77	0.86	0.09	0.20	0.29	311	2,771	3,082	31.4	0.07	0.45	3,888
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.07	2.96	1.47	5.43	0.02	0.09	0.77	0.86	0.09	0.20	0.29	311	2,796	3,107	31.4	0.07	1.52	3,913
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.56	0.54	0.27	0.99	< 0.005	0.02	0.14	0.16	0.02	0.04	0.05	51.5	463	514	5.19	0.01	0.25	648

Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	0.26	0.31	2.97	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	913	913	0.02	0.04	2.63	927
Area	3.08	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	3.48	3.34	1.46	8.22	0.02	0.10	0.77	0.87	0.10	0.20	0.29	311	2,865	3,176	31.4	0.07	3.01	3,983

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.24	0.37	2.39	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	837	837	0.03	0.04	0.07	849
Area	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	2.69	2.61	1.47	3.32	0.01	0.09	0.77	0.86	0.09	0.20	0.29	311	2,771	3,082	31.4	0.07	0.45	3,888
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.24	0.34	2.37	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	853	853	0.02	0.04	1.13	866
Area	2.69	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	3.07	2.96	1.47	5.43	0.02	0.09	0.77	0.86	0.09	0.20	0.29	311	2,796	3,107	31.4	0.07	1.52	3,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.04	0.06	0.43	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	141	141	< 0.005	0.01	0.19	143
Area	0.49	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.56	0.54	0.27	0.99	< 0.005	0.02	0.14	0.16	0.02	0.04	0.05	51.5	463	514	5.19	0.01	0.25	648

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	0.26	0.31	2.97	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	913	913	0.02	0.04	2.63	927
Area	3.08	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	3.48	3.34	1.46	8.22	0.02	0.10	0.77	0.87	0.10	0.20	0.29	311	2,865	3,176	31.4	0.07	3.01	3,983
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.24	0.37	2.39	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	837	837	0.03	0.04	0.07	849
Area	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	2.69	2.61	1.47	3.32	0.01	0.09	0.77	0.86	0.09	0.20	0.29	311	2,771	3,082	31.4	0.07	0.45	3,888
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.26	0.24	0.34	2.37	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	853	853	0.02	0.04	1.13	866
Area	2.69	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38

Total	3.07	2.96	1.47	5.43	0.02	0.09	0.77	0.86	0.09	0.20	0.29	311	2,796	3,107	31.4	0.07	1.52	3,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.04	0.06	0.43	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	141	141	< 0.005	0.01	0.19	143
Area	0.49	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.56	0.54	0.27	0.99	< 0.005	0.02	0.14	0.16	0.02	0.04	0.05	51.5	463	514	5.19	0.01	0.25	648

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.26	0.25	0.13	2.86	0.01	< 0.005	0.70	0.71	< 0.005	0.18	0.18	—	742	742	0.02	0.02	1.94	749

User Defined Commercial	0.02	0.01	0.18	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.69	178
Total	0.28	0.26	0.31	2.97	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	913	913	0.02	0.04	2.63	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.25	0.23	0.17	2.28	0.01	< 0.005	0.70	0.71	< 0.005	0.18	0.18	—	666	666	0.02	0.02	0.05	672
User Defined Commercial	0.02	0.01	0.19	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.02	177
Total	0.26	0.24	0.37	2.39	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	837	837	0.03	0.04	0.07	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.04	0.04	0.03	0.41	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	113	113	< 0.005	< 0.005	0.14	114
User Defined Commercial	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.05	29.4
Total	0.05	0.04	0.06	0.43	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	141	141	< 0.005	0.01	0.19	143

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.26	0.25	0.13	2.86	0.01	< 0.005	0.70	0.71	< 0.005	0.18	0.18	—	742	742	0.02	0.02	1.94	749
User Defined Commercial	0.02	0.01	0.18	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.69	178
Total	0.28	0.26	0.31	2.97	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	913	913	0.02	0.04	2.63	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.25	0.23	0.17	2.28	0.01	< 0.005	0.70	0.71	< 0.005	0.18	0.18	—	666	666	0.02	0.02	0.05	672

User Defined Commercial	0.02	0.01	0.19	0.11	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	171	171	< 0.005	0.02	0.02	177
Total	0.26	0.24	0.37	2.39	0.01	0.01	0.77	0.78	0.01	0.20	0.20	—	837	837	0.03	0.04	0.07	849
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.04	0.04	0.03	0.41	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	113	113	< 0.005	< 0.005	0.14	114
User Defined Commercial	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.3	28.3	< 0.005	< 0.005	0.05	29.4
Total	0.05	0.04	0.06	0.43	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	141	141	< 0.005	0.01	0.19	143

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.14	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	3.08	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.14	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Total	0.49	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.14	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	3.08	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	2.14	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.17	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consum Products	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Total	0.49	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	105	105	105	38,325	1,006	1,006	1,006	367,353

User Defined Commercial	4.00	4.00	4.00	1,460	80.0	80.0	80.0	29,200

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	105	105	105	38,325	1,006	1,006	1,006	367,353
User Defined Commercial	4.00	4.00	4.00	1,460	80.0	80.0	80.0	29,200

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	149,121	49,707	7,971

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00
User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00
User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.1	annual days of extreme heat
Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.94	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	37.2
AQ-DPM	92.1
Drinking Water	11.4
Lead Risk Housing	84.7

Pesticides	0.00
Toxic Releases	38.0
Traffic	53.0
Effect Indicators	—
CleanUp Sites	92.3
Groundwater	96.7
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	97.5
Solid Waste	42.3
Sensitive Population	—
Asthma	76.8
Cardio-vascular	77.3
Low Birth Weights	2.66
Socioeconomic Factor Indicators	—
Education	53.1
Housing	22.7
Linguistic	23.8
Poverty	44.9
Unemployment	58.4

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.77749262
Employed	59.69459772
Median HI	38.59874246
Education	—

Bachelor's or higher	47.7223149
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—
Auto Access	40.90850764
Active commuting	70.61465418
Social	—
2-parent households	61.01629668
Voting	45.96432696
Neighborhood	—
Alcohol availability	37.62350828
Park access	43.48774541
Retail density	48.67188503
Supermarket access	33.42743488
Tree canopy	87.75824458
Housing	—
Homeownership	51.68741178
Housing habitability	71.48723213
Low-inc homeowner severe housing cost burden	30.65571667
Low-inc renter severe housing cost burden	89.67021686
Uncrowded housing	44.92493263
Health Outcomes	—
Insured adults	44.48864365
Arthritis	0.0
Asthma ER Admissions	29.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	18.9
Cognitively Disabled	20.1
Physically Disabled	21.7
Heart Attack ER Admissions	26.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	97.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	25.4
Elderly	48.0
English Speaking	68.0
Foreign-born	19.8
Outdoor Workers	41.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	44.2
Traffic Density	59.4

Traffic Access	23.0
Other Indices	—
Hardship	52.6
Other Decision Support	—
2016 Voting	1.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant schedule. Building construction length is longer than default.
Construction: Trips and VMT	Adjusted numbers to represent even number of trips.
Operations: Vehicle Data	Based on trip rate

Land Use	Project Description. User Defined Educational = Employees, Part-Time Employees, Visitors User Defined Commercial = Deliveries
Construction: Off-Road Equipment	Signal Board default was 0 and electric; adjusted quantity to 1. Added trencher to site preparation.
Construction: On-Road Fugitive Dust	Project is in an urbanized area with paved roads.
Operations: Fleet Mix	Revised Fleet Mix to reflect trip generation characteristics for Employee, Visitor, and Delivery Trips.
Operations: Road Dust	Project is in an urban area.

CDR Temple Type 2 Special Event Detailed Report

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4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CDR Temple Type 2 Special Event
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.00
Location	1029 W Capitol Ave, West Sacramento, CA 95691, USA
County	Yolo
City	West Sacramento
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	313
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Place of Worship	99.4	1000sqft	2.28	99,414	9,000	—	—	—

Parking Lot	175	Space	1.58	0.00	6,000	—	—	—
Other Asphalt Surfaces	1.47	Acre	1.47	0.00	0.00	—	—	—
User Defined Educational	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Employees, Visitors
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	Deliveries
User Defined Retail	1.00	User Defined Unit	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.6	8.30	4.94	200	0.17	0.17	16.1	16.2	0.16	4.11	4.26	311	22,403	22,714	42.8	1.37	44.0	24,237
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.5	7.21	5.74	184	0.15	0.16	16.1	16.2	0.15	4.11	4.26	311	20,856	21,167	42.9	1.43	1.51	22,669
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.8	7.51	5.33	186	0.16	0.16	16.0	16.2	0.16	4.09	4.25	311	21,187	21,498	42.9	1.40	19.2	23,006

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.07	1.37	0.97	34.0	0.03	0.03	2.92	2.95	0.03	0.75	0.77	51.5	3,508	3,559	7.10	0.23	3.18	3,809
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	Yes	Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.7	5.23	3.80	195	0.16	0.07	16.1	16.1	0.07	4.11	4.17	—	20,451	20,451	11.5	1.34	43.6	21,181
Area	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	17.6	8.30	4.94	200	0.17	0.17	16.1	16.2	0.16	4.11	4.26	311	22,403	22,714	42.8	1.37	44.0	24,237
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.4	4.85	4.64	183	0.15	0.07	16.1	16.1	0.07	4.11	4.17	—	18,922	18,922	11.6	1.40	1.13	19,631
Area	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	16.5	7.21	5.74	184	0.15	0.16	16.1	16.2	0.15	4.11	4.26	311	20,856	21,167	42.9	1.43	1.51	22,669
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.3	4.80	4.20	183	0.15	0.07	16.0	16.1	0.07	4.09	4.16	—	19,244	19,244	11.5	1.37	18.8	19,959
Area	0.38	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	16.8	7.51	5.33	186	0.16	0.16	16.0	16.2	0.16	4.09	4.25	311	21,187	21,498	42.9	1.40	19.2	23,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.97	0.88	0.77	33.4	0.03	0.01	2.92	2.94	0.01	0.75	0.76	—	3,186	3,186	1.91	0.23	3.12	3,305
Area	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

Total	3.07	1.37	0.97	34.0	0.03	0.03	2.92	2.95	0.03	0.75	0.77	51.5	3,508	3,559	7.10	0.23	3.18	3,809

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.7	5.23	3.80	195	0.16	0.07	16.1	16.1	0.07	4.11	4.17	—	20,451	20,451	11.5	1.34	43.6	21,181
Area	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	17.6	8.30	4.94	200	0.17	0.17	16.1	16.2	0.16	4.11	4.26	311	22,403	22,714	42.8	1.37	44.0	24,237
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.4	4.85	4.64	183	0.15	0.07	16.1	16.1	0.07	4.11	4.17	—	18,922	18,922	11.6	1.40	1.13	19,631
Area	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	16.5	7.21	5.74	184	0.15	0.16	16.1	16.2	0.15	4.11	4.26	311	20,856	21,167	42.9	1.43	1.51	22,669
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16.3	4.80	4.20	183	0.15	0.07	16.0	16.1	0.07	4.09	4.16	—	19,244	19,244	11.5	1.37	18.8	19,959
Area	0.38	2.66	0.02	2.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.77	8.77	< 0.005	< 0.005	—	8.80

Energy	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,929	1,929	0.22	0.01	—	1,938
Water	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Waste	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	16.8	7.51	5.33	186	0.16	0.16	16.0	16.2	0.16	4.09	4.25	311	21,187	21,498	42.9	1.40	19.2	23,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.97	0.88	0.77	33.4	0.03	0.01	2.92	2.94	0.01	0.75	0.76	—	3,186	3,186	1.91	0.23	3.12	3,305
Area	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Energy	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	319	319	0.04	< 0.005	—	321
Water	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17
Waste	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	3.07	1.37	0.97	34.0	0.03	0.03	2.92	2.95	0.03	0.75	0.77	51.5	3,508	3,559	7.10	0.23	3.18	3,809

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	5.26	4.97	2.66	57.1	0.15	0.06	14.1	14.1	0.06	3.56	3.61	—	14,844	14,844	0.36	0.33	38.7	14,990
User Defined Commercial	0.04	0.03	0.36	0.23	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	342	342	0.01	0.04	1.38	356
User Defined Retail	11.4	0.23	0.78	138	0.01	0.01	1.86	1.87	0.01	0.51	0.52	—	5,265	5,265	11.1	0.97	3.48	5,836
Total	16.7	5.23	3.80	195	0.16	0.07	16.1	16.1	0.07	4.11	4.17	—	20,451	20,451	11.5	1.34	43.6	21,181
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	4.91	4.59	3.46	45.5	0.13	0.06	14.1	14.1	0.06	3.56	3.61	—	13,315	13,315	0.45	0.39	1.00	13,444
User Defined Commercial	0.04	0.03	0.39	0.22	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	342	342	0.01	0.04	0.04	354
User Defined Retail	11.4	0.23	0.79	138	0.01	0.01	1.86	1.87	0.01	0.51	0.52	—	5,265	5,265	11.1	0.97	0.09	5,832
Total	16.4	4.85	4.64	183	0.15	0.07	16.1	16.1	0.07	4.11	4.17	—	18,922	18,922	11.6	1.40	1.13	19,631
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.88	0.83	0.55	8.24	0.02	0.01	2.56	2.57	0.01	0.65	0.66	—	2,258	2,258	0.07	0.06	2.77	2,280
User Defined Commercial	0.01	0.01	0.07	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	56.6	56.6	< 0.005	0.01	0.10	58.8
User Defined Retail	2.08	0.04	0.14	25.1	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	872	872	1.84	0.16	0.25	966
Total	2.97	0.88	0.77	33.4	0.03	0.01	2.92	2.94	0.01	0.75	0.76	—	3,186	3,186	1.91	0.23	3.12	3,305

4.1.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Educational	5.26	4.97	2.66	57.1	0.15	0.06	14.1	14.1	0.06	3.56	3.61	—	14,844	14,844	0.36	0.33	38.7	14,990
User Defined Commercial	0.04	0.03	0.36	0.23	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	342	342	0.01	0.04	1.38	356
User Defined Retail	11.4	0.23	0.78	138	0.01	0.01	1.86	1.87	0.01	0.51	0.52	—	5,265	5,265	11.1	0.97	3.48	5,836
Total	16.7	5.23	3.80	195	0.16	0.07	16.1	16.1	0.07	4.11	4.17	—	20,451	20,451	11.5	1.34	43.6	21,181
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	4.91	4.59	3.46	45.5	0.13	0.06	14.1	14.1	0.06	3.56	3.61	—	13,315	13,315	0.45	0.39	1.00	13,444
User Defined Commercial	0.04	0.03	0.39	0.22	< 0.005	0.01	0.14	0.14	0.01	0.04	0.04	—	342	342	0.01	0.04	0.04	354
User Defined Retail	11.4	0.23	0.79	138	0.01	0.01	1.86	1.87	0.01	0.51	0.52	—	5,265	5,265	11.1	0.97	0.09	5,832
Total	16.4	4.85	4.64	183	0.15	0.07	16.1	16.1	0.07	4.11	4.17	—	18,922	18,922	11.6	1.40	1.13	19,631
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	0.88	0.83	0.55	8.24	0.02	0.01	2.56	2.57	0.01	0.65	0.66	—	2,258	2,258	0.07	0.06	2.77	2,280
User Defined Commercial	0.01	0.01	0.07	0.04	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	56.6	56.6	< 0.005	0.01	0.10	58.8
User Defined Retail	2.08	0.04	0.14	25.1	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	872	872	1.84	0.16	0.25	966
Total	2.97	0.88	0.77	33.4	0.03	0.01	2.92	2.94	0.01	0.75	0.76	—	3,186	3,186	1.91	0.23	3.12	3,305

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	574	574	0.09	0.01	—	580
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	33.7	33.7	0.01	< 0.005	—	34.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	608	608	0.10	0.01	—	614
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	95.0	95.0	0.02	< 0.005	—	96.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.58	5.58	< 0.005	< 0.005	—	5.63
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	101	101	0.02	< 0.005	—	102

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.12	0.06	1.11	0.93	0.01	0.08	—	0.08	0.08	—	0.08	—	1,321	1,321	0.12	< 0.005	—	1,325
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.20	0.17	< 0.005	0.02	—	0.02	0.02	—	0.02	—	219	219	0.02	< 0.005	—	219

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

Total	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.77	0.71	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Total	0.77	3.02	0.04	4.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	17.8	17.8	< 0.005	< 0.005	—	17.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	2.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	0.06	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46
Total	0.07	0.48	< 0.005	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.45	1.45	< 0.005	< 0.005	—	1.46

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.4.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	5.96	5.55	11.5	0.61	0.01	—	31.2

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.07	0.07	< 0.005	< 0.005	—	0.07
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	5.96	5.62	11.6	0.61	0.01	—	31.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	0.99	0.92	1.91	0.10	< 0.005	—	5.16
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.99	0.93	1.92	0.10	< 0.005	—	5.17

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.5.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	305	0.00	305	30.5	0.00	—	1,068
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Educational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Commercial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Retail	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	50.6	0.00	50.6	5.05	0.00	—	177

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.6.2. Mitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.38	0.38
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Place of Worship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	2,100	2,100	2,100	766,500	20,129	20,129	20,129	7,347,064
User Defined Commercial	8.00	8.00	8.00	2,920	160	160	160	58,400
User Defined Retail	96.0	96.0	96.0	35,040	1,920	1,920	1,920	700,800

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Place of Worship	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Educational	2,100	2,100	2,100	766,500	20,129	20,129	20,129	7,347,064

User Defined Commercial	8.00	8.00	8.00	2,920	160	160	160	58,400
User Defined Retail	96.0	96.0	96.0	35,040	1,920	1,920	1,920	700,800

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	149,121	49,707	7,971

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00
User Defined Retail	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Place of Worship	1,026,942	204	0.0330	0.0040	4,121,566
Parking Lot	60,291	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Educational	0.00	204	0.0330	0.0040	0.00
User Defined Commercial	0.00	204	0.0330	0.0040	0.00
User Defined Retail	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00

User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00
User Defined Retail	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Place of Worship	3,110,556	117,122
Parking Lot	0.00	78,082
Other Asphalt Surfaces	0.00	0.00
User Defined Educational	0.00	0.00
User Defined Commercial	0.00	0.00
User Defined Retail	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—
User Defined Retail	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Place of Worship	567	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Educational	0.00	—
User Defined Commercial	0.00	—
User Defined Retail	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Place of Worship	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Place of Worship	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Place of Worship	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00

Place of Worship	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.1	annual days of extreme heat
Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.94	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6
AQ-PM	37.2
AQ-DPM	92.1
Drinking Water	11.4
Lead Risk Housing	84.7

Pesticides	0.00
Toxic Releases	38.0
Traffic	53.0
Effect Indicators	—
CleanUp Sites	92.3
Groundwater	96.7
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	97.5
Solid Waste	42.3
Sensitive Population	—
Asthma	76.8
Cardio-vascular	77.3
Low Birth Weights	2.66
Socioeconomic Factor Indicators	—
Education	53.1
Housing	22.7
Linguistic	23.8
Poverty	44.9
Unemployment	58.4

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	37.77749262
Employed	59.69459772
Median HI	38.59874246

Education	—
Bachelor's or higher	47.7223149
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—
Auto Access	40.90850764
Active commuting	70.61465418
Social	—
2-parent households	61.01629668
Voting	45.96432696
Neighborhood	—
Alcohol availability	37.62350828
Park access	43.48774541
Retail density	48.67188503
Supermarket access	33.42743488
Tree canopy	87.75824458
Housing	—
Homeownership	51.68741178
Housing habitability	71.48723213
Low-inc homeowner severe housing cost burden	30.65571667
Low-inc renter severe housing cost burden	89.67021686
Uncrowded housing	44.92493263
Health Outcomes	—
Insured adults	44.48864365
Arthritis	0.0
Asthma ER Admissions	29.7
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	18.9
Cognitively Disabled	20.1
Physically Disabled	21.7
Heart Attack ER Admissions	26.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	97.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	25.4
Elderly	48.0
English Speaking	68.0
Foreign-born	19.8
Outdoor Workers	41.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	44.2
Traffic Density	59.4
Traffic Access	23.0
Other Indices	—
Hardship	52.6
Other Decision Support	—
2016 Voting	1.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant schedule. Building construction length is longer than default.
Construction: Trips and VMT	Adjusted numbers to represent even number of trips.
Operations: Vehicle Data	Typical Day has 38 passenger vehicle trips per day and 4 truck trips per day.
Land Use	Project Description. User Defined Educational = Employees, Part-Time Employees, Visitors User Defined Commercial = Deliveries User Defined Retail = Shuttles
Construction: Off-Road Equipment	Signal Board default was 0 and electric; adjusted quantity to 1. Added trencher to site preparation.
Construction: On-Road Fugitive Dust	Project is in an urbanized area with paved roads.
Operations: Fleet Mix	Revised Fleet Mix to reflect trip generation characteristics for Employee, Visitor, Delivery Trips, and Shuttles.
Operations: Road Dust	Project is in an urban area.

CDR Temple Construction Health Risk Assessment Scenario Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	CDR Temple Construction Health Risk Assessment Scenario
Construction Start Date	6/2/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	6.00
Location	1029 W Capitol Ave, West Sacramento, CA 95691, USA
County	Yolo
City	West Sacramento
Air District	Yolo/Solano AQMD
Air Basin	Sacramento Valley
TAZ	313
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.23

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Place of Worship	99.4	1000sqft	2.28	99,414	9,000	—	—	—

Parking Lot	175	Space	1.58	0.00	6,000	—	—	—
Other Asphalt Surfaces	1.47	Acre	1.47	0.00	0.00	—	—	—
Place of Worship	19.6	1000sqft	0.45	19,620	0.00	—	—	—
Road Widening	0.10	Mile	0.50	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.57	7.20	65.6	68.5	0.12	2.89	23.4	26.3	2.65	10.5	13.2	—	13,162	13,162	0.54	0.18	0.46	13,208
Mit.	2.19	2.08	42.8	75.5	0.12	0.44	9.12	9.54	0.42	4.10	4.51	—	13,162	13,162	0.54	0.18	0.46	13,208
% Reduced	74%	71%	35%	-10%	—	85%	61%	64%	84%	61%	66%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.61	37.7	27.9	33.1	0.06	1.12	1.61	2.73	1.03	0.18	1.21	—	6,580	6,580	0.27	0.07	0.01	6,606
Mit.	1.59	37.2	24.3	39.7	0.06	0.29	0.64	0.93	0.27	0.07	0.35	—	6,580	6,580	0.27	0.07	0.01	6,606

% Reduced	56%	1%	13%	-20%	—	74%	60%	66%	74%	59%	71%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.94	2.06	14.9	16.5	0.03	0.64	2.65	3.29	0.59	1.02	1.61	—	3,166	3,166	0.13	0.03	0.02	3,179
Mit.	0.64	2.04	11.2	18.7	0.03	0.12	1.05	1.18	0.12	0.40	0.52	—	3,166	3,166	0.13	0.03	0.02	3,179
% Reduced	67%	1%	25%	-13%	—	81%	60%	64%	80%	61%	68%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35	0.38	2.72	3.01	0.01	0.12	0.48	0.60	0.11	0.19	0.29	—	524	524	0.02	0.01	< 0.005	526
Mit.	0.12	0.37	2.04	3.42	0.01	0.02	0.19	0.21	0.02	0.07	0.10	—	524	524	0.02	0.01	< 0.005	526
% Reduced	67%	1%	25%	-13%	—	81%	60%	64%	80%	61%	68%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	80.0	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Mit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	—	—	—	—	—	—	80.0	—	—	—	—	—	—	—	—	—	—
Unmit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Mit.	—	—	Yes	—	—	—	—	No	—	—	Yes	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes
Mit.	—	No	No	—	—	—	—	Yes	—	—	Yes	—	—	—	—	—	—	Yes

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.57	7.20	65.6	68.5	0.12	2.89	23.4	26.3	2.65	10.5	13.2	—	13,162	13,162	0.54	0.18	0.46	13,208
2026	1.29	1.08	10.1	13.1	0.02	0.38	< 0.005	0.38	0.35	< 0.005	0.35	—	2,433	2,433	0.10	0.03	0.04	2,443
2027	1.24	1.04	9.61	13.1	0.02	0.34	< 0.005	0.34	0.31	< 0.005	0.31	—	2,432	2,432	0.10	0.02	0.03	2,442
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.61	3.02	27.9	33.1	0.06	1.12	1.61	2.73	1.03	0.18	1.21	—	6,580	6,580	0.27	0.07	0.01	6,606
2026	1.29	1.08	10.1	13.1	0.02	0.38	< 0.005	0.38	0.35	< 0.005	0.35	—	2,433	2,433	0.10	0.03	< 0.005	2,443
2027	1.24	1.04	9.62	13.1	0.02	0.34	< 0.005	0.34	0.31	< 0.005	0.31	—	2,433	2,433	0.10	0.03	< 0.005	2,443
2028	1.20	37.7	9.15	13.1	0.02	0.30	< 0.005	0.30	0.28	< 0.005	0.28	—	2,432	2,432	0.10	0.02	< 0.005	2,442
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.94	1.63	14.9	16.5	0.03	0.64	2.65	3.29	0.59	1.02	1.61	—	3,166	3,166	0.13	0.03	0.02	3,179
2026	0.92	0.77	7.20	9.36	0.02	0.27	< 0.005	0.27	0.25	< 0.005	0.25	—	1,738	1,738	0.07	0.02	0.01	1,745
2027	0.89	0.74	6.87	9.34	0.02	0.24	< 0.005	0.24	0.22	< 0.005	0.22	—	1,737	1,737	0.07	0.02	0.01	1,745
2028	0.05	2.06	0.43	0.63	< 0.005	0.02	< 0.005	0.02	0.01	< 0.005	0.01	—	96.5	96.5	< 0.005	< 0.005	< 0.005	96.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.35	0.30	2.72	3.01	0.01	0.12	0.48	0.60	0.11	0.19	0.29	—	524	524	0.02	0.01	< 0.005	526
2026	0.17	0.14	1.31	1.71	< 0.005	0.05	< 0.005	0.05	0.05	< 0.005	0.05	—	288	288	0.01	< 0.005	< 0.005	289
2027	0.16	0.14	1.25	1.70	< 0.005	0.04	< 0.005	0.04	0.04	< 0.005	0.04	—	288	288	0.01	< 0.005	< 0.005	289

2028	0.01	0.38	0.08	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	< 0.005	16.0

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.19	2.08	42.8	75.5	0.12	0.44	9.12	9.54	0.42	4.10	4.51	—	13,162	13,162	0.54	0.18	0.46	13,208
2026	0.62	0.56	9.39	15.1	0.02	0.11	< 0.005	0.11	0.10	< 0.005	0.10	—	2,433	2,433	0.10	0.03	0.04	2,443
2027	0.61	0.55	9.35	15.1	0.02	0.10	< 0.005	0.10	0.10	< 0.005	0.10	—	2,432	2,432	0.10	0.02	0.03	2,442
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.59	1.45	24.3	39.7	0.06	0.29	0.64	0.93	0.27	0.07	0.35	—	6,580	6,580	0.27	0.07	0.01	6,606
2026	0.62	0.56	9.40	15.1	0.02	0.11	< 0.005	0.11	0.10	< 0.005	0.10	—	2,433	2,433	0.10	0.03	< 0.005	2,443
2027	0.61	0.55	9.36	15.1	0.02	0.10	< 0.005	0.10	0.10	< 0.005	0.10	—	2,433	2,433	0.10	0.03	< 0.005	2,443
2028	0.59	37.2	9.31	15.1	0.02	0.10	< 0.005	0.10	0.10	< 0.005	0.10	—	2,432	2,432	0.10	0.02	< 0.005	2,442
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.64	0.59	11.2	18.7	0.03	0.12	1.05	1.18	0.12	0.40	0.52	—	3,166	3,166	0.13	0.03	0.02	3,179
2026	0.44	0.40	6.71	10.8	0.02	0.08	< 0.005	0.08	0.07	< 0.005	0.07	—	1,738	1,738	0.07	0.02	0.01	1,745
2027	0.43	0.39	6.68	10.8	0.02	0.07	< 0.005	0.07	0.07	< 0.005	0.07	—	1,737	1,737	0.07	0.02	0.01	1,745
2028	0.02	2.04	0.46	0.67	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	96.5	96.5	< 0.005	< 0.005	< 0.005	96.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.12	0.11	2.04	3.42	0.01	0.02	0.19	0.21	0.02	0.07	0.10	—	524	524	0.02	0.01	< 0.005	526
2026	0.08	0.07	1.22	1.97	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	288	288	0.01	< 0.005	< 0.005	289
2027	0.08	0.07	1.22	1.97	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	288	288	0.01	< 0.005	< 0.005	289
2028	< 0.005	0.37	0.08	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	16.0	16.0	< 0.005	< 0.005	< 0.005	16.0

3. Construction Emissions Details

3.1. Demolition (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.86	2.40	22.2	19.9	0.03	0.92	—	0.92	0.84	—	0.84	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.45	0.45	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.83
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.01	15.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15

3.2. Demolition (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.88	0.79	10.7	18.4	0.03	0.17	—	0.17	0.16	—	0.16	—	3,425	3,425	0.14	0.03	—	3,437
Demolition	—	—	—	—	—	—	0.45	0.45	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.59	1.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	188	188	0.01	< 0.005	—	188
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.1	31.1	< 0.005	< 0.005	—	31.2
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.83
Hauling	0.01	< 0.005	0.09	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.1	15.1	< 0.005	< 0.005	0.01	15.9

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15

3.3. Site Preparation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.17	3.50	32.9	31.6	0.05	1.42	—	1.42	1.31	—	1.31	—	5,503	5,503	0.22	0.04	—	5,522
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.30	2.80	2.69	< 0.005	0.12	—	0.12	0.11	—	0.11	—	467	467	0.02	< 0.005	—	469
Dust From Material Movement	—	—	—	—	—	—	1.67	1.67	—	0.86	0.86	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.51	0.49	< 0.005	0.02	—	0.02	0.02	—	0.02	—	77.4	77.4	< 0.005	< 0.005	—	77.6
Dust From Material Movement	—	—	—	—	—	—	0.30	0.30	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.83	16.0	29.8	0.05	0.16	—	0.16	0.15	—	0.15	—	5,503	5,503	0.22	0.04	—	5,522
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	1.36	2.53	< 0.005	0.01	—	0.01	0.01	—	0.01	—	467	467	0.02	< 0.005	—	469
Dust From Material Movement	—	—	—	—	—	—	0.65	0.65	—	0.33	0.33	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.25	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.4	77.4	< 0.005	< 0.005	—	77.6
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.98
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	7.20	7.20	—	3.44	3.44	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8

Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	0.28	0.16	3.53	2.36	0.01	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	570	570	0.10	0.09	0.44	600
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
Hauling	0.01	< 0.005	0.08	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	< 0.005	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.19

3.6. Grading (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.47	10.0	17.8	0.03	0.08	—	0.08	0.08	—	0.08	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	—	2.81	2.81	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.22	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.04	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5
Hauling	0.28	0.16	3.53	2.36	0.01	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	570	570	0.10	0.09	0.44	600
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.25
Hauling	0.01	< 0.005	0.08	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	< 0.005	13.2
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.19

3.7. Building Construction (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.28	2.64	3.29	0.01	0.11	—	0.11	0.10	—	0.10	—	605	605	0.02	< 0.005	—	607
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.48	0.60	< 0.005	0.02	—	0.02	0.02	—	0.02	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	< 0.005	0.01	0.04	38.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.7	36.7	< 0.005	0.01	< 0.005	38.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.22	9.22	< 0.005	< 0.005	< 0.005	9.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.53	1.53	< 0.005	< 0.005	< 0.005	1.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.56	9.21	15.0	0.02	0.11	—	0.11	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.56	9.21	15.0	0.02	0.11	—	0.11	0.11	—	0.11	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	2.33	3.78	0.01	0.03	—	0.03	0.03	—	0.03	—	605	605	0.02	< 0.005	—	607

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.42	0.69	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.4	36.4	< 0.005	0.01	0.04	38.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.7	36.7	< 0.005	0.01	< 0.005	38.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.22	9.22	< 0.005	< 0.005	< 0.005	9.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.53	1.53	< 0.005	< 0.005	< 0.005	1.61
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	< 0.005	0.01	0.04	37.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	< 0.005	38.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.16	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	0.01	27.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.25	4.25	< 0.005	< 0.005	< 0.005	4.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.61	0.55	9.17	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.55	9.17	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.39	6.55	10.7	0.02	0.08	—	0.08	0.07	—	0.07	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	1.20	1.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.8	35.8	< 0.005	0.01	0.04	37.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	36.1	36.1	< 0.005	0.01	< 0.005	38.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.16	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	0.01	27.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.25	4.25	< 0.005	< 0.005	< 0.005	4.47
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	0.03	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.5	35.5	< 0.005	0.01	< 0.005	37.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.16	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	0.01	26.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.18	4.18	< 0.005	< 0.005	< 0.005	4.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2027) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.54	9.13	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.54	9.13	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.39	6.52	10.7	0.02	0.07	—	0.07	0.07	—	0.07	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	1.19	1.95	< 0.005	0.01	—	0.01	0.01	—	0.01	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.13	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.2	35.2	< 0.005	0.01	0.03	36.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.23	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.5	35.5	< 0.005	0.01	< 0.005	37.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.16	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	0.01	26.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.18	4.18	< 0.005	< 0.005	< 0.005	4.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.33	2.33	< 0.005	< 0.005	—	2.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	34.9	34.9	< 0.005	0.01	< 0.005	36.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.53	9.09	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.1	14.1	< 0.005	< 0.005	—	14.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.33	2.33	< 0.005	< 0.005	—	2.34
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.01	0.01	0.22	0.14	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	34.9	34.9	< 0.005	0.01	< 0.005	36.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	< 0.005	0.21
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.04
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Paving (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516

Paving	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.5	74.5	< 0.005	< 0.005	—	74.8
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	< 0.005	3.66
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Paving (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.21	10.6	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.36	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.5	74.5	< 0.005	< 0.005	—	74.8
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	< 0.005	3.66
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	36.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	< 0.005	3.66
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Architectural Coating (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	36.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.32	7.32	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	1.99	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.21	1.21	< 0.005	< 0.005	—	1.22
Architectural Coatings	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.49	3.49	< 0.005	< 0.005	< 0.005	3.66
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.20
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Linear, Grubbing & Land Clearing (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.53	4.58	4.81	0.01	0.25	—	0.25	0.23	—	0.23	—	681	681	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.3	24.3	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.02	4.02	< 0.005	< 0.005	—	4.03
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	2.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Linear, Grubbing & Land Clearing (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	3.44	4.77	0.01	0.07	—	0.07	0.07	—	0.07	—	681	681	0.03	0.01	—	684
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.3	24.3	< 0.005	< 0.005	—	24.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.02	4.02	< 0.005	< 0.005	—	4.03
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	< 0.005	2.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	< 0.005	0.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Linear, Grading & Excavation (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.39	3.69	32.6	36.9	0.07	1.46	—	1.46	1.35	—	1.35	—	7,645	7,645	0.31	0.06	—	7,671

Dust From Material Movement	—	—	—	—	—	—	3.71	3.71	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.26	5.96	0.01	0.24	—	0.24	0.22	—	0.22	—	1,236	1,236	0.05	0.01	—	1,240
Dust From Material Movement	—	—	—	—	—	—	0.60	0.60	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.09	< 0.005	0.04	—	0.04	0.04	—	0.04	—	205	205	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.83
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.62
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Linear, Grading & Excavation (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29	1.24	26.7	45.6	0.07	0.27	—	0.27	0.26	—	0.26	—	7,645	7,645	0.31	0.06	—	7,671
Dust From Material Movement	—	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.20	4.32	7.38	0.01	0.04	—	0.04	0.04	—	0.04	—	1,236	1,236	0.05	0.01	—	1,240
Dust From Material Movement	—	—	—	—	—	—	0.23	0.23	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.79	1.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	205	205	0.01	< 0.005	—	205
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.64	3.64	< 0.005	< 0.005	< 0.005	3.83
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.59	0.59	< 0.005	< 0.005	< 0.005	0.62

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.25	1.88	17.2	19.9	0.04	0.69	—	0.69	0.64	—	0.64	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	1.59	1.59	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.88	2.18	< 0.005	0.08	—	0.08	0.07	—	0.07	—	448	448	0.02	< 0.005	—	450
Dust From Material Movement	—	—	—	—	—	—	0.17	0.17	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.34	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	74.2	74.2	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.87	14.8	24.5	0.04	0.17	—	0.17	0.17	—	0.17	—	4,090	4,090	0.17	0.03	—	4,104
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.87	14.8	24.5	0.04	0.17	—	0.17	0.17	—	0.17	—	4,090	4,090	0.17	0.03	—	4,104

Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.62	2.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	448	448	0.02	< 0.005	—	450
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.30	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.2	74.2	< 0.005	< 0.005	—	74.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	0.15	58.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.06	6.06	< 0.005	< 0.005	0.01	6.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Linear, Paving (2025) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.86	7.92	11.7	0.02	0.34	—	0.34	0.31	—	0.31	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.43	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.9	96.9	< 0.005	< 0.005	—	97.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Linear, Paving (2025) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.27	8.24	12.4	0.02	0.09	—	0.09	0.09	—	0.09	—	1,769	1,769	0.07	0.01	—	1,775
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.45	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	96.9	96.9	< 0.005	< 0.005	—	97.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	55.3	55.3	< 0.005	0.01	< 0.005	57.9

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.03	3.03	< 0.005	< 0.005	< 0.005	3.17
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/2/2025	6/30/2025	5.00	20.0	—
Site Preparation	Site Preparation	7/1/2025	8/12/2025	5.00	31.0	—
Grading	Grading	8/13/2025	8/22/2025	5.00	8.00	—
Building Construction	Building Construction	8/25/2025	1/3/2028	5.00	616	—
Paving	Paving	1/4/2028	1/27/2028	5.00	18.0	—
Architectural Coating	Architectural Coating	1/10/2028	2/4/2028	5.00	20.0	—
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	6/2/2025	6/20/2025	5.00	13.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	6/21/2025	9/11/2025	5.00	59.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	9/12/2025	11/7/2025	5.00	40.0	—
Linear, Paving	Linear, Paving	11/8/2025	12/6/2025	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Diesel	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41

Linear, Grading & Excavation	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82

Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	4.00	8.00	84.0	0.37
Site Preparation	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Grading	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Diesel	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 4 Interim	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Tier 4 Interim	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 4 Interim	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 4 Interim	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 4 Interim	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 4 Interim	1.00	8.00	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 4 Interim	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Tier 4 Interim	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Tier 4 Interim	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Tier 4 Interim	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	1.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	0.00	14.3	LDA,LDT1,LDT2
Demolition	Vendor	2.00	0.25	HHDT,MHDT
Demolition	Hauling	6.00	0.25	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	0.00	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	0.00	14.3	LDA,LDT1,LDT2

Grading	Vendor	6.00	0.25	HHDT,MHDT
Grading	Hauling	226	0.25	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.25	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Paving	Vendor	2.00	0.25	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	0.25	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	0.25	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT

Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	2.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	0.00	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	0.00	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	0.00	14.3	LDA,LDT1,LDT2
Demolition	Vendor	2.00	0.25	HHDT,MHDT
Demolition	Hauling	6.00	0.25	HHDT
Demolition	Onsite truck	0.00	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	0.00	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	6.00	0.25	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	—	HHDT
Grading	—	—	—	—
Grading	Worker	0.00	14.3	LDA,LDT1,LDT2
Grading	Vendor	6.00	0.25	HHDT,MHDT

Grading	Hauling	226	0.25	HHDT
Grading	Onsite truck	0.00	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	0.00	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.25	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	—	HHDT
Paving	—	—	—	—
Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Paving	Vendor	2.00	0.25	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.00	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	2.00	0.25	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	2.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	2.00	0.25	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT

Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	2.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	0.00	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	0.00	14.3	LDA,LDT1,LDT2
Linear, Paving	Vendor	2.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	0.00	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	178,551	59,517	7,971

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	8,900	—
Site Preparation	—	—	46.5	0.00	—
Grading	—	14,436	8.00	0.00	—

Paving	0.00	0.00	0.00	0.00	3.55
Linear, Grubbing & Land Clearing	—	—	0.50	0.00	—
Linear, Grading & Excavation	—	—	0.50	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.50	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Place of Worship	0.00	0%
Parking Lot	1.58	100%
Other Asphalt Surfaces	1.47	100%
Place of Worship	0.00	0%
Road Widening	0.50	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	88.1	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.1	annual days of extreme heat
Extreme Precipitation	5.50	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.94	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	42.6

AQ-PM	37.2
AQ-DPM	92.1
Drinking Water	11.4
Lead Risk Housing	84.7
Pesticides	0.00
Toxic Releases	38.0
Traffic	53.0
Effect Indicators	—
CleanUp Sites	92.3
Groundwater	96.7
Haz Waste Facilities/Generators	93.0
Impaired Water Bodies	97.5
Solid Waste	42.3
Sensitive Population	—
Asthma	76.8
Cardio-vascular	77.3
Low Birth Weights	2.66
Socioeconomic Factor Indicators	—
Education	53.1
Housing	22.7
Linguistic	23.8
Poverty	44.9
Unemployment	58.4

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	37.77749262
Employed	59.69459772
Median HI	38.59874246
Education	—
Bachelor's or higher	47.7223149
High school enrollment	100
Preschool enrollment	15.83472347
Transportation	—
Auto Access	40.90850764
Active commuting	70.61465418
Social	—
2-parent households	61.01629668
Voting	45.96432696
Neighborhood	—
Alcohol availability	37.62350828
Park access	43.48774541
Retail density	48.67188503
Supermarket access	33.42743488
Tree canopy	87.75824458
Housing	—
Homeownership	51.68741178
Housing habitability	71.48723213
Low-inc homeowner severe housing cost burden	30.65571667
Low-inc renter severe housing cost burden	89.67021686
Uncrowded housing	44.92493263
Health Outcomes	—

Insured adults	44.48864365
Arthritis	0.0
Asthma ER Admissions	29.7
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	18.9
Cognitively Disabled	20.1
Physically Disabled	21.7
Heart Attack ER Admissions	26.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	97.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	25.4

Elderly	48.0
English Speaking	68.0
Foreign-born	19.8
Outdoor Workers	41.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	44.2
Traffic Density	59.4
Traffic Access	23.0
Other Indices	—
Hardship	52.6
Other Decision Support	—
2016 Voting	1.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	66.0
Healthy Places Index Score for Project Location (b)	48.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Based on applicant schedule. Building construction length is longer than default.
Construction: Trips and VMT	Adjusted numbers to represent even number of trips. Removed non-diesel vehicles (worker trips) and reduced trip length to 0.25 miles to represent onsite emissions.
Operations: Vehicle Data	average of 30 trips per day weekdays and weekends per Traffic Study.
Land Use	Project Description
Construction: Off-Road Equipment	Signal Board default was 0 and electric; adjusted quantity to 1. Added trencher to site preparation.
Construction: On-Road Fugitive Dust	Project is in an urbanized area with paved roads.

Attachment B

Health Risk Assessment Output Files

CDR

Construction HRA

Project Construction Emissions

Year	Unmitigated DPM tons/year	Mitigated DPM tons/year
2025	0.116071361	0.022596831
2026	0.049388995	0.013868793
2027	0.043903606	0.013023256
2028	0.002775767	0.001028993
Total	**0.212**	**0.051**
Total Lbs	**424.279**	**101.0357**
Lbs/year	**154.716**	**36.8433**
Lbs/hour	**0.07**	**0.0177**

	Offsite		Onsite	
MEIR Risk	**Unmitigated**	**Mitigated**	**Unmitigated**	**Mitigated**
Cancer (persons in a million)	**17.84**	**4.25**	**2.79**	**0.66**
Chronic	**0.0090**	**0.002**	**0.050**	**0.010**

Conversions:

1 ton =	2,000	lb
Construction =	8	hours/day
	2080	hours/year
	260	days/year
	12	months

AERMOD Assumptions

Source Name	Description	No. of Vol. Sources	Emission Rate g/s	Release Height m	Plume Height m	Plume Width m
SLINE1	Off-Road Equipment and Trucks	342	1.00	5.00	10.00	10.00

Receptors

Grid Sizes	Spacing
Uniform Cartesian	< 50 meters
Discrete	Nearest Sensitive Receptors

Meteorological Data

Station Name		Years	Lat	Long	Elev (m)
KVCB	Nut Tree Airport Station	2017-2021	38.377	-121.964	33.2

https://ww2.arb.ca.gov/resources/documents/harp-aermod-meteorological-files

Other Model Assumption

Rural or Urban	Urban	
Urban Grp Pop	220,544	US Census 2022
Terrain Data	NED 1	https://www.census.gov/quickfacts/fact/table/yolocountycalifornia/AFN120217
Lakes Version	12.0.0	
AERMOD Version	23132	

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**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 5/28/2024
** File: C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\CDR_Construction.ADI
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** AERMOD Control Pathway
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**
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CO STARTING
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   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 220544 US_Census_2022_-_Yolo_County_Population
   POLLUTID PM_10
   RUNORNOT RUN
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
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** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Construction Equipment and Trucks
** PREFIX
** Length of Side = 10.00
** Configuration = Adjacent
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** Vertical Dimension = 10.00
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   LOCATION L0000005     VOLUME   628732.414 4271321.884 4.88
   LOCATION L0000006     VOLUME   628729.012 4271312.480 4.89
   LOCATION L0000007     VOLUME   628725.610 4271303.076 4.92
   LOCATION L0000008     VOLUME   628722.209 4271293.673 4.94
   LOCATION L0000009     VOLUME   628718.807 4271284.269 4.96
   LOCATION L0000010     VOLUME   628715.405 4271274.866 4.94
   LOCATION L0000011     VOLUME   628712.003 4271265.462 4.92
   LOCATION L0000012     VOLUME   628708.601 4271256.059 4.91
   LOCATION L0000013     VOLUME   628705.199 4271246.655 4.89
   LOCATION L0000014     VOLUME   628701.797 4271237.251 4.86
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SRCPARAM L0000261     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000262     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000263     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000264     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000266     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000267     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000268     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000269     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000294     0.0029239766      5.00      4.65      4.65
SRCPARAM L0000295     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000302     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000308     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000311     0.0029239766      5.00      4.65      4.65
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SRCPARAM L0000319     0.0029239766      5.00      4.65      4.65
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   SRCPARAM L0000341     0.0029239766      5.00      4.65      4.65
   SRCPARAM L0000342     0.0029239766      5.00      4.65      4.65
** ------------------------------------------------------------------
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED CDR_Construction.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE KVCB_724828_93241\724828_2017-2021_AdjU.sfc
   PROFFILE KVCB_724828_93241\724828_2017-2021_AdjU.PFL
   SURFDATA 93241 2017 Nut_Tree_Airport
   UAIRDATA 23230 2017 OAKLAND/WSO_AP
   PROFBASE 33.2 METERS
   STARTEND 2017 1 1 2017 12 31
ME FINISHED
```

```
**
************************************
** AERMOD Output Pathway
************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CDR_Construction.AD\01H1GALL.PLT 31
   PLOTFILE PERIOD ALL CDR_Construction.AD\PE00GALL.PLT 32
   SUMMFILE CDR_Construction.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     799       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     799       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

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- - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   342 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =    220544.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    342 Source(s);       1 Source Group(s); and     464
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    342 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  21112

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
```

Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   33.20 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.7 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **File for Summary of Results: CDR_Construction.sum

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                                *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE   AIRCRAFT
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- -

 L0000001   0   0.29240E-02 628746.0 4271359.5   4.8   5.00   4.65
4.65   YES   NO
 L0000002   0   0.29240E-02 628742.6 4271350.1   4.8   5.00   4.65
4.65   YES   NO
 L0000003   0   0.29240E-02 628739.2 4271340.7   4.9   5.00   4.65
4.65   YES   NO

L0000004	0	0.29240E-02	628735.8	4271331.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000005	0	0.29240E-02	628732.4	4271321.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000006	0	0.29240E-02	628729.0	4271312.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000007	0	0.29240E-02	628725.6	4271303.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000008	0	0.29240E-02	628722.2	4271293.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000009	0	0.29240E-02	628718.8	4271284.3	5.0	5.00	4.65	
4.65	YES	NO						
L0000010	0	0.29240E-02	628715.4	4271274.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000011	0	0.29240E-02	628712.0	4271265.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000012	0	0.29240E-02	628708.6	4271256.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000013	0	0.29240E-02	628705.2	4271246.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000014	0	0.29240E-02	628701.8	4271237.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000015	0	0.29240E-02	628698.4	4271227.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000016	0	0.29240E-02	628695.0	4271218.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000017	0	0.29240E-02	628691.6	4271209.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000018	0	0.29240E-02	628688.2	4271199.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000019	0	0.29240E-02	628684.8	4271190.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000020	0	0.29240E-02	628681.4	4271180.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000021	0	0.29240E-02	628678.0	4271171.4	4.7	5.00	4.65	
4.65	YES	NO						
L0000022	0	0.29240E-02	628674.6	4271162.0	4.6	5.00	4.65	
4.65	YES	NO						
L0000023	0	0.29240E-02	628671.2	4271152.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000024	0	0.29240E-02	628667.8	4271143.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000025	0	0.29240E-02	628668.7	4271138.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000026	0	0.29240E-02	628677.7	4271143.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000027	0	0.29240E-02	628686.7	4271147.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000028	0	0.29240E-02	628695.7	4271151.9	4.8	5.00	4.65	
4.65	YES	NO						

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 L0000029         0   0.29240E-02  628704.6 4271156.3     4.7     5.00     4.65
4.65     YES                     NO
 L0000030         0   0.29240E-02  628713.6 4271160.7     4.7     5.00     4.65
4.65     YES                     NO
 L0000031         0   0.29240E-02  628722.6 4271165.1     4.8     5.00     4.65
4.65     YES                     NO
 L0000032         0   0.29240E-02  628731.6 4271169.6     4.8     5.00     4.65
4.65     YES                     NO
 L0000033         0   0.29240E-02  628740.5 4271174.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000034         0   0.29240E-02  628749.5 4271178.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000035         0   0.29240E-02  628758.5 4271182.8     4.8     5.00     4.65
4.65     YES                     NO
 L0000036         0   0.29240E-02  628767.5 4271187.2     4.7     5.00     4.65
4.65     YES                     NO
 L0000037         0   0.29240E-02  628776.4 4271191.6     4.7     5.00     4.65
4.65     YES                     NO
 L0000038         0   0.29240E-02  628785.4 4271196.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000039         0   0.29240E-02  628794.4 4271200.4     4.9     5.00     4.65
4.65     YES                     NO
 L0000040         0   0.29240E-02  628803.4 4271204.8     4.9     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        16:20:37

                                  PAGE   3
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000041         0   0.29240E-02  628812.3 4271209.3     4.9     5.00     4.65
4.65     YES                     NO
 L0000042         0   0.29240E-02  628821.3 4271213.7     4.9     5.00     4.65
4.65     YES                     NO
 L0000043         0   0.29240E-02  628830.3 4271218.1     4.9     5.00     4.65
4.65     YES                     NO
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L0000044	0	0.29240E-02	628839.3	4271222.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000045	0	0.29240E-02	628848.2	4271226.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000046	0	0.29240E-02	628857.2	4271231.3	5.1	5.00	4.65	
4.65	YES	NO						
L0000047	0	0.29240E-02	628866.2	4271235.7	5.1	5.00	4.65	
4.65	YES	NO						
L0000048	0	0.29240E-02	628875.2	4271240.1	5.2	5.00	4.65	
4.65	YES	NO						
L0000049	0	0.29240E-02	628884.1	4271244.5	5.2	5.00	4.65	
4.65	YES	NO						
L0000050	0	0.29240E-02	628893.1	4271249.0	5.2	5.00	4.65	
4.65	YES	NO						
L0000051	0	0.29240E-02	628900.9	4271254.2	5.2	5.00	4.65	
4.65	YES	NO						
L0000052	0	0.29240E-02	628902.4	4271264.1	5.2	5.00	4.65	
4.65	YES	NO						
L0000053	0	0.29240E-02	628903.9	4271274.0	5.1	5.00	4.65	
4.65	YES	NO						
L0000054	0	0.29240E-02	628905.4	4271283.9	5.1	5.00	4.65	
4.65	YES	NO						
L0000055	0	0.29240E-02	628906.9	4271293.8	5.1	5.00	4.65	
4.65	YES	NO						
L0000056	0	0.29240E-02	628908.4	4271303.7	5.1	5.00	4.65	
4.65	YES	NO						
L0000057	0	0.29240E-02	628909.9	4271313.5	5.2	5.00	4.65	
4.65	YES	NO						
L0000058	0	0.29240E-02	628911.4	4271323.4	5.2	5.00	4.65	
4.65	YES	NO						
L0000059	0	0.29240E-02	628912.9	4271333.3	5.2	5.00	4.65	
4.65	YES	NO						
L0000060	0	0.29240E-02	628914.4	4271343.2	5.2	5.00	4.65	
4.65	YES	NO						
L0000061	0	0.29240E-02	628915.9	4271353.1	5.3	5.00	4.65	
4.65	YES	NO						
L0000062	0	0.29240E-02	628917.4	4271363.0	5.3	5.00	4.65	
4.65	YES	NO						
L0000063	0	0.29240E-02	628918.9	4271372.9	5.3	5.00	4.65	
4.65	YES	NO						
L0000064	0	0.29240E-02	628920.4	4271382.8	5.3	5.00	4.65	
4.65	YES	NO						
L0000065	0	0.29240E-02	628922.0	4271392.6	5.3	5.00	4.65	
4.65	YES	NO						
L0000066	0	0.29240E-02	628923.5	4271402.5	5.3	5.00	4.65	
4.65	YES	NO						
L0000067	0	0.29240E-02	628925.0	4271412.4	5.3	5.00	4.65	
4.65	YES	NO						
L0000068	0	0.29240E-02	628926.5	4271422.3	5.3	5.00	4.65	
4.65	YES	NO						

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 L0000069         0   0.29240E-02  628923.7 4271427.1     5.3     5.00     4.65
4.65     YES                     NO
 L0000070         0   0.29240E-02  628914.1 4271424.0     5.3     5.00     4.65
4.65     YES                     NO
 L0000071         0   0.29240E-02  628904.6 4271420.9     5.3     5.00     4.65
4.65     YES                     NO
 L0000072         0   0.29240E-02  628895.1 4271417.8     5.2     5.00     4.65
4.65     YES                     NO
 L0000073         0   0.29240E-02  628885.6 4271414.7     5.2     5.00     4.65
4.65     YES                     NO
 L0000074         0   0.29240E-02  628876.1 4271411.6     5.2     5.00     4.65
4.65     YES                     NO
 L0000075         0   0.29240E-02  628866.6 4271408.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000076         0   0.29240E-02  628857.1 4271405.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000077         0   0.29240E-02  628847.6 4271402.4     5.1     5.00     4.65
4.65     YES                     NO
 L0000078         0   0.29240E-02  628838.1 4271399.3     5.1     5.00     4.65
4.65     YES                     NO
 L0000079         0   0.29240E-02  628828.6 4271396.2     5.1     5.00     4.65
4.65     YES                     NO
 L0000080         0   0.29240E-02  628819.0 4271393.1     5.1     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000081         0   0.29240E-02  628809.5 4271390.0     5.1     5.00     4.65
4.65     YES                     NO
 L0000082         0   0.29240E-02  628800.0 4271386.9     5.0     5.00     4.65
4.65     YES                     NO
 L0000083         0   0.29240E-02  628790.5 4271383.8     5.0     5.00     4.65
4.65     YES                     NO
```

L0000084	0	0.29240E-02	628781.0	4271380.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000085	0	0.29240E-02	628771.5	4271377.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000086	0	0.29240E-02	628764.1	4271372.4	4.9	5.00	4.65	
4.65	YES	NO						
L0000087	0	0.29240E-02	628761.0	4271362.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000088	0	0.29240E-02	628757.9	4271353.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000089	0	0.29240E-02	628754.9	4271343.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000090	0	0.29240E-02	628751.8	4271334.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000091	0	0.29240E-02	628748.7	4271324.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000092	0	0.29240E-02	628745.7	4271315.3	4.8	5.00	4.65	
4.65	YES	NO						
L0000093	0	0.29240E-02	628742.6	4271305.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000094	0	0.29240E-02	628739.5	4271296.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000095	0	0.29240E-02	628736.5	4271286.8	5.0	5.00	4.65	
4.65	YES	NO						
L0000096	0	0.29240E-02	628733.4	4271277.3	5.0	5.00	4.65	
4.65	YES	NO						
L0000097	0	0.29240E-02	628730.3	4271267.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000098	0	0.29240E-02	628727.3	4271258.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000099	0	0.29240E-02	628724.2	4271248.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000100	0	0.29240E-02	628721.1	4271239.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000101	0	0.29240E-02	628718.1	4271229.7	4.8	5.00	4.65	
4.65	YES	NO						
L0000102	0	0.29240E-02	628715.0	4271220.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000103	0	0.29240E-02	628711.9	4271210.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000104	0	0.29240E-02	628708.9	4271201.1	4.8	5.00	4.65	
4.65	YES	NO						
L0000105	0	0.29240E-02	628705.8	4271191.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000106	0	0.29240E-02	628702.7	4271182.1	4.7	5.00	4.65	
4.65	YES	NO						
L0000107	0	0.29240E-02	628699.7	4271172.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000108	0	0.29240E-02	628708.7	4271176.7	4.7	5.00	4.65	
4.65	YES	NO						

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 L0000109         0   0.29240E-02  628717.7 4271180.9     4.7     5.00     4.65
4.65     YES                     NO
 L0000110         0   0.29240E-02  628726.8 4271185.1     4.7     5.00     4.65
4.65     YES                     NO
 L0000111         0   0.29240E-02  628735.9 4271189.3     4.6     5.00     4.65
4.65     YES                     NO
 L0000112         0   0.29240E-02  628745.0 4271193.5     4.6     5.00     4.65
4.65     YES                     NO
 L0000113         0   0.29240E-02  628754.1 4271197.6     4.7     5.00     4.65
4.65     YES                     NO
 L0000114         0   0.29240E-02  628763.1 4271201.8     4.7     5.00     4.65
4.65     YES                     NO
 L0000115         0   0.29240E-02  628772.2 4271206.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000116         0   0.29240E-02  628781.3 4271210.2     4.8     5.00     4.65
4.65     YES                     NO
 L0000117         0   0.29240E-02  628790.4 4271214.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000118         0   0.29240E-02  628799.5 4271218.6     4.8     5.00     4.65
4.65     YES                     NO
 L0000119         0   0.29240E-02  628808.5 4271222.8     4.7     5.00     4.65
4.65     YES                     NO
 L0000120         0   0.29240E-02  628817.6 4271227.0     4.8     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000121         0   0.29240E-02  628826.7 4271231.2     4.9     5.00     4.65
4.65     YES                     NO
 L0000122         0   0.29240E-02  628835.8 4271235.4     5.0     5.00     4.65
4.65     YES                     NO
 L0000123         0   0.29240E-02  628844.9 4271239.6     5.0     5.00     4.65
4.65     YES                     NO
```

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 L0000124         0   0.29240E-02  628853.9 4271243.7     5.1     5.00     4.65
4.65     YES                   NO
 L0000125         0   0.29240E-02  628863.0 4271247.9     5.1     5.00     4.65
4.65     YES                   NO
 L0000126         0   0.29240E-02  628872.1 4271252.1     5.1     5.00     4.65
4.65     YES                   NO
 L0000127         0   0.29240E-02  628881.2 4271256.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000128         0   0.29240E-02  628883.4 4271265.7     5.2     5.00     4.65
4.65     YES                   NO
 L0000129         0   0.29240E-02  628885.0 4271275.6     5.2     5.00     4.65
4.65     YES                   NO
 L0000130         0   0.29240E-02  628886.5 4271285.5     5.2     5.00     4.65
4.65     YES                   NO
 L0000131         0   0.29240E-02  628888.1 4271295.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000132         0   0.29240E-02  628889.7 4271305.2     5.2     5.00     4.65
4.65     YES                   NO
 L0000133         0   0.29240E-02  628891.2 4271315.1     5.2     5.00     4.65
4.65     YES                   NO
 L0000134         0   0.29240E-02  628892.8 4271325.0     5.3     5.00     4.65
4.65     YES                   NO
 L0000135         0   0.29240E-02  628894.4 4271334.8     5.3     5.00     4.65
4.65     YES                   NO
 L0000136         0   0.29240E-02  628896.0 4271344.7     5.3     5.00     4.65
4.65     YES                   NO
 L0000137         0   0.29240E-02  628897.5 4271354.6     5.3     5.00     4.65
4.65     YES                   NO
 L0000138         0   0.29240E-02  628899.1 4271364.5     5.3     5.00     4.65
4.65     YES                   NO
 L0000139         0   0.29240E-02  628900.7 4271374.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000140         0   0.29240E-02  628902.2 4271384.2     5.2     5.00     4.65
4.65     YES                   NO
 L0000141         0   0.29240E-02  628903.8 4271394.1     5.2     5.00     4.65
4.65     YES                   NO
 L0000142         0   0.29240E-02  628905.4 4271404.0     5.2     5.00     4.65
4.65     YES                   NO
 L0000143         0   0.29240E-02  628907.0 4271413.8     5.2     5.00     4.65
4.65     YES                   NO
 L0000144         0   0.29240E-02  628900.2 4271413.8     5.2     5.00     4.65
4.65     YES                   NO
 L0000145         0   0.29240E-02  628890.8 4271410.6     5.2     5.00     4.65
4.65     YES                   NO
 L0000146         0   0.29240E-02  628881.3 4271407.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000147         0   0.29240E-02  628871.9 4271404.0     5.2     5.00     4.65
4.65     YES                   NO
 L0000148         0   0.29240E-02  628862.4 4271400.7     5.1     5.00     4.65
4.65     YES                   NO
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 L0000149         0   0.29240E-02  628853.0 4271397.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000150         0   0.29240E-02  628843.5 4271394.2     5.1     5.00     4.65
4.65     YES                     NO
 L0000151         0   0.29240E-02  628834.1 4271390.9     5.1     5.00     4.65
4.65     YES                     NO
 L0000152         0   0.29240E-02  628824.6 4271387.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000153         0   0.29240E-02  628815.2 4271384.4     5.0     5.00     4.65
4.65     YES                     NO
 L0000154         0   0.29240E-02  628805.8 4271381.1     5.0     5.00     4.65
4.65     YES                     NO
 L0000155         0   0.29240E-02  628796.3 4271377.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000156         0   0.29240E-02  628786.9 4271374.5     5.0     5.00     4.65
4.65     YES                     NO
 L0000157         0   0.29240E-02  628777.4 4271371.3     5.0     5.00     4.65
4.65     YES                     NO
 L0000158         0   0.29240E-02  628771.1 4271365.0     4.9     5.00     4.65
4.65     YES                     NO
 L0000159         0   0.29240E-02  628768.4 4271355.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000160         0   0.29240E-02  628765.7 4271345.7     4.8     5.00     4.65
4.65     YES                     NO
↟ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000161         0   0.29240E-02  628763.0 4271336.1     4.8     5.00     4.65
4.65     YES                     NO
 L0000162         0   0.29240E-02  628760.3 4271326.5     4.8     5.00     4.65
4.65     YES                     NO
 L0000163         0   0.29240E-02  628757.5 4271316.9     4.8     5.00     4.65
4.65     YES                     NO
```

L0000164	0	0.29240E-02	628754.8	4271307.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000165	0	0.29240E-02	628752.1	4271297.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000166	0	0.29240E-02	628749.4	4271288.0	4.9	5.00	4.65	
4.65	YES	NO						
L0000167	0	0.29240E-02	628746.7	4271278.4	4.9	5.00	4.65	
4.65	YES	NO						
L0000168	0	0.29240E-02	628743.9	4271268.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000169	0	0.29240E-02	628741.2	4271259.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000170	0	0.29240E-02	628738.5	4271249.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000171	0	0.29240E-02	628735.8	4271239.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000172	0	0.29240E-02	628733.0	4271230.3	4.8	5.00	4.65	
4.65	YES	NO						
L0000173	0	0.29240E-02	628730.3	4271220.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000174	0	0.29240E-02	628727.6	4271211.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000175	0	0.29240E-02	628731.3	4271208.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000176	0	0.29240E-02	628740.6	4271212.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000177	0	0.29240E-02	628749.9	4271216.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000178	0	0.29240E-02	628759.1	4271220.0	4.9	5.00	4.65	
4.65	YES	NO						
L0000179	0	0.29240E-02	628768.4	4271223.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000180	0	0.29240E-02	628777.6	4271227.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000181	0	0.29240E-02	628786.9	4271231.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000182	0	0.29240E-02	628796.1	4271235.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000183	0	0.29240E-02	628805.4	4271238.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000184	0	0.29240E-02	628814.7	4271242.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000185	0	0.29240E-02	628823.9	4271246.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000186	0	0.29240E-02	628833.2	4271250.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000187	0	0.29240E-02	628842.4	4271254.0	5.1	5.00	4.65	
4.65	YES	NO						
L0000188	0	0.29240E-02	628851.7	4271257.8	5.1	5.00	4.65	
4.65	YES	NO						

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 L0000189         0   0.29240E-02  628860.9 4271261.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000190         0   0.29240E-02  628866.1 4271268.6     5.2     5.00     4.65
4.65     YES                     NO
 L0000191         0   0.29240E-02  628867.8 4271278.5     5.2     5.00     4.65
4.65     YES                     NO
 L0000192         0   0.29240E-02  628869.4 4271288.3     5.2     5.00     4.65
4.65     YES                     NO
 L0000193         0   0.29240E-02  628871.0 4271298.2     5.2     5.00     4.65
4.65     YES                     NO
 L0000194         0   0.29240E-02  628872.6 4271308.1     5.2     5.00     4.65
4.65     YES                     NO
 L0000195         0   0.29240E-02  628874.2 4271317.9     5.2     5.00     4.65
4.65     YES                     NO
 L0000196         0   0.29240E-02  628875.9 4271327.8     5.2     5.00     4.65
4.65     YES                     NO
 L0000197         0   0.29240E-02  628877.5 4271337.7     5.2     5.00     4.65
4.65     YES                     NO
 L0000198         0   0.29240E-02  628879.1 4271347.5     5.2     5.00     4.65
4.65     YES                     NO
 L0000199         0   0.29240E-02  628880.7 4271357.4     5.2     5.00     4.65
4.65     YES                     NO
 L0000200         0   0.29240E-02  628882.3 4271367.3     5.2     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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 L0000201         0   0.29240E-02  628884.0 4271377.2     5.2     5.00     4.65
4.65     YES                     NO
 L0000202         0   0.29240E-02  628885.6 4271387.0     5.2     5.00     4.65
4.65     YES                     NO
 L0000203         0   0.29240E-02  628887.2 4271396.9     5.2     5.00     4.65
4.65     YES                     NO
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L0000204	0	0.29240E-02	628883.0	4271399.9	5.2	5.00	4.65	
4.65	YES	NO						
L0000205	0	0.29240E-02	628873.6	4271396.7	5.2	5.00	4.65	
4.65	YES	NO						
L0000206	0	0.29240E-02	628864.1	4271393.4	5.1	5.00	4.65	
4.65	YES	NO						
L0000207	0	0.29240E-02	628854.7	4271390.2	5.1	5.00	4.65	
4.65	YES	NO						
L0000208	0	0.29240E-02	628845.2	4271386.9	5.1	5.00	4.65	
4.65	YES	NO						
L0000209	0	0.29240E-02	628835.7	4271383.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000210	0	0.29240E-02	628826.3	4271380.4	5.0	5.00	4.65	
4.65	YES	NO						
L0000211	0	0.29240E-02	628816.8	4271377.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000212	0	0.29240E-02	628807.4	4271373.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000213	0	0.29240E-02	628797.9	4271370.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000214	0	0.29240E-02	628788.5	4271367.4	5.0	5.00	4.65	
4.65	YES	NO						
L0000215	0	0.29240E-02	628779.1	4271364.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000216	0	0.29240E-02	628776.3	4271354.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000217	0	0.29240E-02	628773.6	4271344.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000218	0	0.29240E-02	628770.8	4271335.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000219	0	0.29240E-02	628768.1	4271325.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000220	0	0.29240E-02	628765.3	4271316.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000221	0	0.29240E-02	628762.5	4271306.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000222	0	0.29240E-02	628759.8	4271296.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000223	0	0.29240E-02	628757.0	4271287.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000224	0	0.29240E-02	628754.3	4271277.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000225	0	0.29240E-02	628758.5	4271271.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000226	0	0.29240E-02	628768.2	4271269.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000227	0	0.29240E-02	628777.8	4271266.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000228	0	0.29240E-02	628787.5	4271264.1	5.0	5.00	4.65	
4.65	YES	NO						

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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
 L0000235         0   0.29240E-02  628833.9 4271289.0     5.1     5.00     4.65
4.65     YES                     NO
 L0000236         0   0.29240E-02  628837.7 4271298.2     5.1     5.00     4.65
4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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 L0000241         0   0.29240E-02  628856.9 4271344.4     5.1     5.00     4.65
4.65     YES                     NO
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4.65     YES                     NO
 L0000243         0   0.29240E-02  628864.6 4271362.8     5.2     5.00     4.65
4.65     YES                     NO
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 L0000244         0   0.29240E-02  628868.5 4271372.1     5.2     5.00     4.65
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4.65     YES                   NO
 L0000246         0   0.29240E-02  628866.1 4271381.4     5.2     5.00     4.65
4.65     YES                   NO
 L0000247         0   0.29240E-02  628856.5 4271378.6     5.1     5.00     4.65
4.65     YES                   NO
 L0000248         0   0.29240E-02  628846.9 4271375.7     5.0     5.00     4.65
4.65     YES                   NO
 L0000249         0   0.29240E-02  628837.3 4271372.9     5.0     5.00     4.65
4.65     YES                   NO
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4.65     YES                   NO
 L0000251         0   0.29240E-02  628818.1 4271367.2     5.0     5.00     4.65
4.65     YES                   NO
 L0000252         0   0.29240E-02  628808.5 4271364.3     5.0     5.00     4.65
4.65     YES                   NO
 L0000253         0   0.29240E-02  628799.0 4271361.5     5.0     5.00     4.65
4.65     YES                   NO
 L0000254         0   0.29240E-02  628791.3 4271356.5     5.0     5.00     4.65
4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
 L0000262         0   0.29240E-02  628762.4 4271281.9     4.9     5.00     4.65
4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                   NO
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4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
 L0000273         0   0.29240E-02  628834.6 4271315.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000274         0   0.29240E-02  628838.2 4271325.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000275         0   0.29240E-02  628841.8 4271334.5     5.0     5.00     4.65
4.65     YES                     NO
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4.65     YES                     NO
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4.65     YES                     NO
 L0000278         0   0.29240E-02  628852.5 4271362.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000279         0   0.29240E-02  628844.7 4271362.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000280         0   0.29240E-02  628834.9 4271360.2     5.0     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000281         0   0.29240E-02  628825.1 4271358.2     5.0     5.00     4.65
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 L0000282         0   0.29240E-02  628815.3 4271356.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000283         0   0.29240E-02  628805.5 4271354.2     5.0     5.00     4.65
4.65     YES                     NO
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L0000284	0	0.29240E-02	628798.0	4271349.4	5.0	5.00	4.65	
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L0000285	0	0.29240E-02	628794.4	4271340.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000286	0	0.29240E-02	628790.7	4271330.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000287	0	0.29240E-02	628787.1	4271321.5	4.8	5.00	4.65	
4.65	YES	NO						
L0000288	0	0.29240E-02	628783.4	4271312.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000289	0	0.29240E-02	628779.8	4271302.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000290	0	0.29240E-02	628776.1	4271293.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000291	0	0.29240E-02	628776.6	4271286.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000292	0	0.29240E-02	628786.0	4271283.0	4.9	5.00	4.65	
4.65	YES	NO						
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4.65	YES	NO						
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4.65	YES	NO						
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4.65	YES	NO						
L0000296	0	0.29240E-02	628815.4	4271287.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000297	0	0.29240E-02	628818.5	4271296.6	5.0	5.00	4.65	
4.65	YES	NO						
L0000298	0	0.29240E-02	628821.6	4271306.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000299	0	0.29240E-02	628824.7	4271315.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000300	0	0.29240E-02	628827.8	4271325.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000301	0	0.29240E-02	628830.9	4271334.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000302	0	0.29240E-02	628834.0	4271344.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000303	0	0.29240E-02	628830.9	4271347.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000304	0	0.29240E-02	628821.1	4271345.5	5.0	5.00	4.65	
4.65	YES	NO						
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4.65	YES	NO						
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4.65	YES	NO						
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4.65	YES	NO						

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4.65     YES                    NO
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4.65     YES                    NO
 L0000312         0   0.29240E-02  628784.9 4271289.1     4.9     5.00     4.65
4.65     YES                    NO
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4.65     YES                    NO
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4.65     YES                    NO
 L0000315         0   0.29240E-02  628809.6 4271287.2     5.0     5.00     4.65
4.65     YES                    NO
 L0000316         0   0.29240E-02  628812.9 4271296.6     5.0     5.00     4.65
4.65     YES                    NO
 L0000317         0   0.29240E-02  628816.1 4271306.1     5.0     5.00     4.65
4.65     YES                    NO
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4.65     YES                    NO
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4.65     YES                    NO
 L0000320         0   0.29240E-02  628818.7 4271330.9     5.0     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000321         0   0.29240E-02  628809.1 4271333.8     5.0     5.00     4.65
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4.65     YES                    NO
 L0000323         0   0.29240E-02  628798.0 4271323.4     4.9     5.00     4.65
4.65     YES                    NO
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4.65     YES                    NO
 L0000326         0   0.29240E-02  628787.3 4271295.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000327         0   0.29240E-02  628791.9 4271290.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000328         0   0.29240E-02  628801.6 4271288.2     4.9     5.00     4.65
4.65     YES                    NO
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4.65     YES                    NO
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4.65     YES                    NO
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4.65     YES                    NO
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4.65     YES                    NO
 L0000333         0   0.29240E-02  628811.1 4271327.5     5.0     5.00     4.65
4.65     YES                    NO
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4.65     YES                    NO
 L0000335         0   0.29240E-02  628799.9 4271317.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000336         0   0.29240E-02  628796.5 4271307.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000337         0   0.29240E-02  628793.0 4271298.5     4.9     5.00     4.65
4.65     YES                    NO
 L0000338         0   0.29240E-02  628798.8 4271293.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000339         0   0.29240E-02  628804.3 4271299.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000340         0   0.29240E-02  628807.7 4271308.7     4.9     5.00     4.65
4.65     YES                    NO
 L0000341         0   0.29240E-02  628811.1 4271318.1     4.9     5.00     4.65
4.65     YES                    NO
 L0000342         0   0.29240E-02  628808.9 4271324.4     4.9     5.00     4.65
4.65     YES                    NO
↟ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                              SOURCE IDs
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             L0000073    , L0000074    , L0000075    , L0000076    , L0000077    ,
L0000078    , L0000079    , L0000080    ,

             L0000081    , L0000082    , L0000083    , L0000084    , L0000085    ,
L0000086    , L0000087    , L0000088    ,

             L0000089    , L0000090    , L0000091    , L0000092    , L0000093    ,
L0000094    , L0000095    , L0000096    ,

             L0000097    , L0000098    , L0000099    , L0000100    , L0000101    ,
L0000102    , L0000103    , L0000104    ,

             L0000105    , L0000106    , L0000107    , L0000108    , L0000109    ,
L0000110    , L0000111    , L0000112    ,

             L0000113    , L0000114    , L0000115    , L0000116    , L0000117    ,
L0000118    , L0000119    , L0000120    ,

             L0000121    , L0000122    , L0000123    , L0000124    , L0000125    ,
L0000126    , L0000127    , L0000128    ,
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

L0000161 , L0000162 , L0000163 , L0000164 , L0000165 ,
L0000166 , L0000167 , L0000168 ,

L0000169 , L0000170 , L0000171 , L0000172 , L0000173 ,
L0000174 , L0000175 , L0000176 ,

L0000177 , L0000178 , L0000179 , L0000180 , L0000181 ,
L0000182 , L0000183 , L0000184 ,

L0000185 , L0000186 , L0000187 , L0000188 , L0000189 ,
L0000190 , L0000191 , L0000192 ,

L0000193 , L0000194 , L0000195 , L0000196 , L0000197 ,
L0000198 , L0000199 , L0000200 ,

L0000201 , L0000202 , L0000203 , L0000204 , L0000205 ,
L0000206 , L0000207 , L0000208 ,

L0000209 , L0000210 , L0000211 , L0000212 , L0000213 ,
L0000214 , L0000215 , L0000216 ,

L0000217 , L0000218 , L0000219 , L0000220 , L0000221 ,
L0000222 , L0000223 , L0000224 ,

```
             L0000225    , L0000226    , L0000227    , L0000228    , L0000229    ,
L0000230    , L0000231    , L0000232    ,

             L0000233    , L0000234    , L0000235    , L0000236    , L0000237    ,
L0000238    , L0000239    , L0000240    ,

             L0000241    , L0000242    , L0000243    , L0000244    , L0000245    ,
L0000246    , L0000247    , L0000248    ,

             L0000249    , L0000250    , L0000251    , L0000252    , L0000253    ,
L0000254    , L0000255    , L0000256    ,

             L0000257    , L0000258    , L0000259    , L0000260    , L0000261    ,
L0000262    , L0000263    , L0000264    ,

             L0000265    , L0000266    , L0000267    , L0000268    , L0000269    ,
L0000270    , L0000271    , L0000272    ,

             L0000273    , L0000274    , L0000275    , L0000276    , L0000277    ,
L0000278    , L0000279    , L0000280    ,

             L0000281    , L0000282    , L0000283    , L0000284    , L0000285    ,
L0000286    , L0000287    , L0000288    ,

             L0000289    , L0000290    , L0000291    , L0000292    , L0000293    ,
L0000294    , L0000295    , L0000296    ,

             L0000297    , L0000298    , L0000299    , L0000300    , L0000301    ,
L0000302    , L0000303    , L0000304    ,

             L0000305    , L0000306    , L0000307    , L0000308    , L0000309    ,
L0000310    , L0000311    , L0000312    ,

             L0000313    , L0000314    , L0000315    , L0000316    , L0000317    ,
L0000318    , L0000319    , L0000320    ,
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES
***

URBAN ID	URBAN POP	SOURCE IDs
	220544.	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
		L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
		L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
		L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
		L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
		L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
		L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
		L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES
***

URBAN ID	URBAN POP	SOURCE IDs

```
            L0000161    , L0000162    , L0000163    , L0000164    , L0000165    ,
L0000166    , L0000167    , L0000168    ,

            L0000169    , L0000170    , L0000171    , L0000172    , L0000173    ,
L0000174    , L0000175    , L0000176    ,

            L0000177    , L0000178    , L0000179    , L0000180    , L0000181    ,
L0000182    , L0000183    , L0000184    ,

            L0000185    , L0000186    , L0000187    , L0000188    , L0000189    ,
L0000190    , L0000191    , L0000192    ,

            L0000193    , L0000194    , L0000195    , L0000196    , L0000197    ,
L0000198    , L0000199    , L0000200    ,

            L0000201    , L0000202    , L0000203    , L0000204    , L0000205    ,
L0000206    , L0000207    , L0000208    ,

            L0000209    , L0000210    , L0000211    , L0000212    , L0000213    ,
L0000214    , L0000215    , L0000216    ,

            L0000217    , L0000218    , L0000219    , L0000220    , L0000221    ,
L0000222    , L0000223    , L0000224    ,

            L0000225    , L0000226    , L0000227    , L0000228    , L0000229    ,
L0000230    , L0000231    , L0000232    ,

            L0000233    , L0000234    , L0000235    , L0000236    , L0000237    ,
L0000238    , L0000239    , L0000240    ,

            L0000241    , L0000242    , L0000243    , L0000244    , L0000245    ,
L0000246    , L0000247    , L0000248    ,

            L0000249    , L0000250    , L0000251    , L0000252    , L0000253    ,
L0000254    , L0000255    , L0000256    ,

            L0000257    , L0000258    , L0000259    , L0000260    , L0000261    ,
L0000262    , L0000263    , L0000264    ,

            L0000265    , L0000266    , L0000267    , L0000268    , L0000269    ,
L0000270    , L0000271    , L0000272    ,

            L0000273    , L0000274    , L0000275    , L0000276    , L0000277    ,
L0000278    , L0000279    , L0000280    ,

            L0000281    , L0000282    , L0000283    , L0000284    , L0000285    ,
L0000286    , L0000287    , L0000288    ,

            L0000289    , L0000290    , L0000291    , L0000292    , L0000293    ,
```

L0000294   , L0000295   , L0000296   ,

             L0000297   , L0000298   , L0000299   , L0000300   , L0000301   ,
L0000302   , L0000303   , L0000304   ,

             L0000305   , L0000306   , L0000307   , L0000308   , L0000309   ,
L0000310   , L0000311   , L0000312   ,

             L0000313   , L0000314   , L0000315   , L0000316   , L0000317   ,
L0000318   , L0000319   , L0000320   ,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

             L0000321   , L0000322   , L0000323   , L0000324   , L0000325   ,
L0000326   , L0000327   , L0000328   ,

             L0000329   , L0000330   , L0000331   , L0000332   , L0000333   ,
L0000334   , L0000335   , L0000336   ,

             L0000337   , L0000338   , L0000339   , L0000340   , L0000341   ,
L0000342   ,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                       *** GRIDDED RECEPTOR NETWORK SUMMARY ***

                                  *** NETWORK ID: UCART1   ; NETWORK TYPE: GRIDCART
***

                                        *** X-COORDINATES OF GRID ***
                                                  (METERS)

627895.4, 627944.0, 627992.6, 628041.2, 628089.8, 628138.3, 628186.9,
628235.5, 628284.1, 628332.7,
628381.2, 628429.8, 628478.4, 628527.0, 628575.6, 628624.1, 628672.7,
628721.3, 628769.9, 628818.5,
628867.0,

*** Y-COORDINATES OF GRID ***
(METERS)

4271457.9, 4271480.8, 4271503.7, 4271526.6, 4271549.5, 4271572.4, 4271595.3,
4271618.2, 4271641.1, 4271664.0,
4271686.9, 4271709.8, 4271732.7, 4271755.6, 4271778.5, 4271801.4, 4271824.3,
4271847.2, 4271870.1, 4271893.0,
4271915.9,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* ELEVATION HEIGHTS IN METERS *

Y-COORD (METERS)	X-COORD (METERS)								
	627895.44	627944.02	627992.60	628041.18	628089.76	628138.34	628186.92	628235.50	628284.08
4271915.92	5.30	5.90	6.60	5.80	5.00	4.80	5.20	5.40	6.30
4271893.02	5.10	5.40	5.40	6.10	6.20	5.30	5.20	5.40	6.10
4271870.12	4.90	5.10	5.00	5.40	5.70	5.90	6.10	5.70	5.80
4271847.22	4.70	5.00	4.90	4.90	5.10	5.70	6.10	6.00	6.20
4271824.32	4.60	4.80	4.90	4.90	4.90	5.00	5.50	6.20	6.60
4271801.42	4.60	4.80	4.90	4.90	4.90	5.00	5.30	5.50	6.00
4271778.52	4.60	4.80	4.90	5.00	4.90	5.10	5.30	5.50	5.80
4271755.62	4.70	4.70	4.80	5.00	5.00	5.10	5.30	5.50	5.70
4271732.72	4.70	4.80	4.80	4.90	5.00				

```
    5.20         5.40         5.40         5.60
  4271709.82 |          4.70         4.90         5.10         5.10         5.00
    5.00         5.50         5.40         5.70
  4271686.92 |          4.80         4.90         5.10         5.20         5.10
    4.90         5.40         5.20         5.70
  4271664.02 |          4.80         4.90         5.10         5.20         5.10
    4.90         5.30         5.10         5.60
  4271641.12 |          4.80         4.80         4.90         4.90         4.80
    4.80         5.00         5.10         5.40
  4271618.22 |          4.70         4.80         4.90         4.90         5.10
    5.20         5.30         5.10         5.40
  4271595.32 |          4.60         4.70         4.90         5.00         5.20
    5.30         5.40         5.30         5.30
  4271572.42 |          4.60         4.70         4.90         5.00         5.10
    5.20         5.30         5.50         5.20
  4271549.52 |          4.60         4.70         4.80         4.90         5.00
    5.00         5.10         5.40         5.10
  4271526.62 |          4.60         4.70         4.90         5.00         5.00
    5.10         5.10         5.20         5.10
  4271503.72 |          4.60         4.70         4.90         5.00         4.90
    5.00         4.90         5.00         5.00
  4271480.82 |          4.60         4.70         4.90         4.90         4.80
    4.80         4.90         5.00         5.00
  4271457.92 |          4.60         4.70         4.80         4.80         4.90
    4.90         5.10         5.10         5.10
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                   *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                              * ELEVATION HEIGHTS IN METERS *

    Y-COORD  |                                                 X-COORD (METERS)
    (METERS) |     628332.66    628381.24    628429.82    628478.40    628526.98
628575.56    628624.14    628672.72    628721.30
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

  4271915.92 |          6.20         5.70         5.40         5.30         5.30
    5.30         5.30         5.50         5.60
  4271893.02 |          6.60         5.60         5.60         5.30         5.20
    5.30         5.40         5.50         5.50
  4271870.12 |          7.50         5.50         5.50         5.30         5.40
    5.50         5.50         5.50         5.50
```

```
  4271847.22 |          8.30          5.30          5.30          5.30          5.40
    5.60          5.50          5.70          5.60
  4271824.32 |          8.90          5.50          5.30          5.20          5.40
    5.60          5.50          5.90          5.70
  4271801.42 |          9.00          6.40          5.40          5.10          5.30
    5.40          5.40          5.90          5.70
  4271778.52 |          8.30          6.10          6.10          5.80          5.50
    5.30          5.30          5.80          5.70
  4271755.62 |          7.50          6.10          5.90          5.90          6.00
    5.80          5.50          5.60          5.70
  4271732.72 |          6.70          6.30          5.40          5.60          6.00
    6.00          5.90          5.80          5.80
  4271709.82 |          6.20          6.30          5.40          5.30          5.20
    5.60          6.20          6.10          5.90
  4271686.92 |          6.00          6.30          5.40          5.40          5.30
    5.20          5.30          5.60          6.30
  4271664.02 |          5.80          6.20          5.40          5.40          5.30
    5.20          5.10          5.20          5.50
  4271641.12 |          5.60          6.00          5.40          5.50          5.40
    5.30          5.10          5.00          5.00
  4271618.22 |          5.50          5.70          5.30          5.50          5.50
    5.30          5.10          5.10          5.00
  4271595.32 |          5.50          5.60          5.30          5.50          5.50
    5.30          5.20          5.20          5.00
  4271572.42 |          5.40          5.60          5.30          5.50          5.50
    5.20          5.10          5.20          5.10
  4271549.52 |          5.20          5.50          5.30          5.40          5.40
    5.20          5.10          5.20          5.20
  4271526.62 |          5.20          5.50          5.40          5.40          5.50
    5.20          5.00          5.30          5.10
  4271503.72 |          5.10          5.50          5.50          5.50          5.40
    5.20          5.10          5.30          5.10
  4271480.82 |          5.10          5.50          5.60          5.50          5.40
    5.20          5.30          5.30          5.20
  4271457.92 |          5.10          5.60          5.60          5.50          5.30
    5.30          5.40          5.40          5.20
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                   *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                                 * ELEVATION HEIGHTS IN METERS *

    Y-COORD  |                                                 X-COORD (METERS)
```

```
    (METERS) |     628769.88    628818.46    628867.04
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

  4271915.92 |          5.40         5.60         5.60
  4271893.02 |          5.40         5.60         5.70
  4271870.12 |          5.50         5.60         5.70
  4271847.22 |          5.50         5.70         5.80
  4271824.32 |          5.50         5.80         5.80
  4271801.42 |          5.40         5.80         5.80
  4271778.52 |          5.50         5.80         5.90
  4271755.62 |          5.60         5.70         5.70
  4271732.72 |          5.50         5.60         5.40
  4271709.82 |          5.60         5.50         5.30
  4271686.92 |          6.20         5.50         5.30
  4271664.02 |          5.90         6.30         5.80
  4271641.12 |          5.30         5.90         6.00
  4271618.22 |          4.80         5.00         5.70
  4271595.32 |          5.00         5.00         5.10
  4271572.42 |          5.20         5.10         5.10
  4271549.52 |          5.20         5.20         5.10
  4271526.62 |          5.10         5.20         5.10
  4271503.72 |          5.10         5.10         5.20
  4271480.82 |          5.10         5.10         5.30
  4271457.92 |          5.10         5.10         5.30
↟ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                              * HILL HEIGHT SCALES IN METERS *

    Y-COORD  |                                                 X-COORD (METERS)
    (METERS) |     627895.44    627944.02    627992.60    628041.18    628089.76
628138.34    628186.92    628235.50    628284.08
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

  4271915.92 |          5.30         5.90         6.60         5.80         5.00
    4.80         5.20         5.40         6.30
  4271893.02 |          5.10         5.40         5.40         6.10         6.20
    5.30         5.20         5.40         6.10
  4271870.12 |          4.90         5.10         5.00         5.40         5.70
    5.90         6.10         5.70         5.80
```

```
  4271847.22 |         4.70         5.00         4.90         4.90         5.10
    5.70         6.10         6.00         6.20
  4271824.32 |         4.60         4.80         4.90         4.90         4.90
    5.00         5.50         6.20         6.60
  4271801.42 |         4.60         4.80         4.90         4.90         4.90
    5.00         5.30         5.50         6.00
  4271778.52 |         4.60         4.80         4.90         5.00         4.90
    5.10         5.30         5.50         5.80
  4271755.62 |         4.70         4.70         4.80         5.00         5.00
    5.10         5.30         5.50         5.70
  4271732.72 |         4.70         4.80         4.80         4.90         5.00
    5.20         5.40         5.40         5.60
  4271709.82 |         4.70         4.90         5.10         5.10         5.00
    5.00         5.50         5.40         5.70
  4271686.92 |         4.80         4.90         5.10         5.20         5.10
    4.90         5.40         5.20         5.70
  4271664.02 |         4.80         4.90         5.10         5.20         5.10
    4.90         5.30         5.10         5.60
  4271641.12 |         4.80         4.80         4.90         4.90         4.80
    4.80         5.00         5.10         5.40
  4271618.22 |         4.70         4.80         4.90         4.90         5.10
    5.20         5.30         5.10         5.40
  4271595.32 |         4.60         4.70         4.90         5.00         5.20
    5.30         5.40         5.30         5.30
  4271572.42 |         4.60         4.70         4.90         5.00         5.10
    5.20         5.30         5.50         5.20
  4271549.52 |         4.60         4.70         4.80         4.90         5.00
    5.00         5.10         5.40         5.10
  4271526.62 |         4.60         4.70         4.90         5.00         5.00
    5.10         5.10         5.20         5.10
  4271503.72 |         4.60         4.70         4.90         5.00         4.90
    5.00         4.90         5.00         5.00
  4271480.82 |         4.60         4.70         4.90         4.90         4.80
    4.80         4.90         5.00         5.00
  4271457.92 |         4.60         4.70         4.80         4.80         4.90
    4.90         5.10         5.10         5.10
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                  *** NETWORK ID: UCART1   ;  NETWORK TYPE: GRIDCART
***

                                                 * HILL HEIGHT SCALES IN METERS *

    Y-COORD  |                                                 X-COORD (METERS)
```

```
    (METERS) |     628332.66    628381.24    628429.82    628478.40    628526.98
628575.56    628624.14    628672.72    628721.30
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -

  4271915.92 |          6.20         5.70         5.40         5.30         5.30
    5.30         5.30         5.50         5.60
  4271893.02 |          6.60         5.60         5.60         5.30         5.20
    5.30         5.40         5.50         5.50
  4271870.12 |          7.50         5.50         5.50         5.30         5.40
    5.50         5.50         5.50         5.50
  4271847.22 |          8.30         5.30         5.30         5.30         5.40
    5.60         5.50         5.70         5.60
  4271824.32 |          8.90         5.50         5.30         5.20         5.40
    5.60         5.50         5.90         5.70
  4271801.42 |          9.00         6.40         5.40         5.10         5.30
    5.40         5.40         5.90         5.70
  4271778.52 |          8.30         6.10         6.10         5.80         5.50
    5.30         5.30         5.80         5.70
  4271755.62 |          7.50         6.10         5.90         5.90         6.00
    5.80         5.50         5.60         5.70
  4271732.72 |          6.70         6.30         5.40         5.60         6.00
    6.00         5.90         5.80         5.80
  4271709.82 |          6.20         6.30         5.40         5.30         5.20
    5.60         6.20         6.10         5.90
  4271686.92 |          6.00         6.30         5.40         5.40         5.30
    5.20         5.30         5.60         6.30
  4271664.02 |          5.80         6.20         5.40         5.40         5.30
    5.20         5.10         5.20         5.50
  4271641.12 |          5.60         6.00         5.40         5.50         5.40
    5.30         5.10         5.00         5.00
  4271618.22 |          5.50         5.70         5.30         5.50         5.50
    5.30         5.10         5.10         5.00
  4271595.32 |          5.50         5.60         5.30         5.50         5.50
    5.30         5.20         5.20         5.00
  4271572.42 |          5.40         5.60         5.30         5.50         5.50
    5.20         5.10         5.20         5.10
  4271549.52 |          5.20         5.50         5.30         5.40         5.40
    5.20         5.10         5.20         5.20
  4271526.62 |          5.20         5.50         5.40         5.40         5.50
    5.20         5.00         5.30         5.10
  4271503.72 |          5.10         5.50         5.50         5.50         5.40
    5.20         5.10         5.30         5.10
  4271480.82 |          5.10         5.50         5.60         5.50         5.40
    5.20         5.30         5.30         5.20
  4271457.92 |          5.10         5.60         5.60         5.50         5.30
    5.30         5.40         5.40         5.20
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
```

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

* HILL HEIGHT SCALES IN METERS *

Y-COORD (METERS)	X-COORD (METERS) 628769.88	628818.46	628867.04
4271915.92	5.40	5.60	5.60
4271893.02	5.40	5.60	5.70
4271870.12	5.50	5.60	5.70
4271847.22	5.50	5.70	5.80
4271824.32	5.50	5.80	5.80
4271801.42	5.40	5.80	5.80
4271778.52	5.50	5.80	5.90
4271755.62	5.60	5.70	5.70
4271732.72	5.50	5.60	5.40
4271709.82	5.60	5.50	5.30
4271686.92	6.20	5.50	5.30
4271664.02	5.90	6.30	5.80
4271641.12	5.30	5.90	6.00
4271618.22	4.80	5.00	5.70
4271595.32	5.00	5.00	5.10
4271572.42	5.20	5.10	5.10
4271549.52	5.20	5.20	5.10
4271526.62	5.10	5.20	5.10
4271503.72	5.10	5.10	5.20
4271480.82	5.10	5.10	5.30
4271457.92	5.10	5.10	5.30

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(628831.6, 4271107.5, 5.4, 5.4, 0.0); (628846.9, 4271117.2, 5.4, 5.4, 0.0);

```
     ( 628859.4, 4271124.9,       5.4,       5.4,       0.0);         ( 628876.7,
4271136.7,       5.4,       5.4,       0.0);
     ( 628888.1, 4271144.8,       5.5,       5.5,       0.0);         ( 628908.0,
4271152.9,       5.4,       5.4,       0.0);
     ( 628920.9, 4271161.7,       5.3,       5.3,       0.0);         ( 628938.2,
4271170.6,       5.3,       5.3,       0.0);
     ( 628950.4, 4271179.4,       5.3,       5.3,       0.0);         ( 628981.3,
4271202.2,       5.3,       5.3,       0.0);
     ( 628991.6, 4271210.0,       5.3,       5.3,       0.0);         ( 629008.9,
4271223.2,       5.4,       5.4,       0.0);
     ( 629020.7, 4271232.5,       5.3,       5.3,       0.0);         ( 629037.7,
4271245.7,       5.4,       5.4,       0.0);
     ( 629048.7, 4271256.0,       5.4,       5.4,       0.0);         ( 628863.2,
4271085.6,       5.5,       5.5,       0.0);
     ( 628885.2, 4271099.2,       5.7,       5.7,       0.0);         ( 628910.2,
4271106.1,       5.7,       5.7,       0.0);
     ( 628956.2, 4271132.0,       5.6,       5.6,       0.0);         ( 628978.9,
4271146.0,       5.6,       5.6,       0.0);
     ( 629005.8, 4271164.4,       5.6,       5.6,       0.0);         ( 629037.1,
4271190.7,       5.5,       5.5,       0.0);
     ( 629066.2, 4271209.1,       5.5,       5.5,       0.0);

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                              *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                                  (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1
```

METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 2017 1 1
 1
AND END DATE: 2017 12 31
24

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23,
10.80,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: KVCB_724828_93241\724828_2017-2021_AdjU.sfc
Met Version: 21112
Profile file: KVCB_724828_93241\724828_2017-2021_AdjU.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 93241 Upper air station no.: 23230
Name: NUT_TREE_AIRPORT Name: OAKLAND/WSO_AP
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-25.0	0.249	-9.000	-9.000	-999.	298.	68.0	0.01	0.54	1.00	4.36	201.	10.0	280.9	2.0
17	01	01	1	02	-36.6	0.365	-9.000	-9.000	-999.	530.	146.7	0.01	0.54	1.00	6.38	211.	10.0	281.4	2.0
17	01	01	1	03	-31.6	0.315	-9.000	-9.000	-999.	425.	108.8	0.01	0.54						

```
1.00    5.53  214.   10.0  280.9    2.0
 17 01 01   1 04  -17.5  0.172 -9.000 -9.000 -999.  184.     32.4  0.01   0.54
1.00    3.18  305.   10.0  276.4    2.0
 17 01 01   1 05   -8.6  0.120 -9.000 -9.000 -999.  101.     18.1  0.03   0.54
1.00    1.93    1.   10.0  274.9    2.0
 17 01 01   1 06  -10.8  0.135 -9.000 -9.000 -999.  119.     20.6  0.03   0.54
1.00    2.15   11.   10.0  275.9    2.0
 17 01 01   1 07  -12.0  0.140 -9.000 -9.000 -999.  126.     21.7  0.02   0.54
1.00    2.42  357.   10.0  276.4    2.0
 17 01 01   1 08   -9.7  0.125 -9.000 -9.000 -999.  107.     18.4  0.02   0.54
1.00    2.18  342.   10.0  277.0    2.0
 17 01 01   1 09    2.6  0.104  0.208  0.005  124.   81.    -39.5  0.03   0.54
0.41    1.38   29.   10.0  277.5    2.0
 17 01 01   1 10    4.4  0.119  0.349  0.005  350.   99.    -35.3  0.02   0.54
0.28    1.72  356.   10.0  279.2    2.0
 17 01 01   1 11   10.9  0.164  0.564  0.005  592.  159.    -36.3  0.03   0.54
0.23    2.15    1.   10.0  280.9    2.0
 17 01 01   1 12   14.5  0.165  0.676  0.017  768.  161.    -28.0  0.03   0.54
0.22    2.13   12.   10.0  281.4    2.0
 17 01 01   1 13   72.0  0.177  1.253  0.019  985.  179.     -6.9  0.03   0.54
0.22    2.08  143.   10.0  282.5    2.0
 17 01 01   1 14   65.1  0.167  1.252  0.020 1084.  163.     -6.4  0.01   0.54
0.23    2.21  191.   10.0  284.9    2.0
 17 01 01   1 15   39.8  0.254  1.063  0.019 1086.  306.    -36.8  0.01   0.54
0.26    3.86  199.   10.0  284.2    2.0
 17 01 01   1 16    9.4  0.267  0.658  0.019 1087.  331.   -181.8  0.01   0.54
0.34    4.32  200.   10.0  284.9    2.0
 17 01 01   1 17  -25.4  0.289 -9.000 -9.000 -999.  373.     92.1  0.01   0.54
0.59    5.09  248.   10.0  283.1    2.0
 17 01 01   1 18  -23.3  0.233 -9.000 -9.000 -999.  272.     59.9  0.01   0.54
1.00    4.15  234.   10.0  282.0    2.0
 17 01 01   1 19  -21.2  0.212 -9.000 -9.000 -999.  234.     49.3  0.01   0.54
1.00    3.78  228.   10.0  281.4    2.0
 17 01 01   1 20  -24.8  0.247 -9.000 -9.000 -999.  295.     67.1  0.01   0.54
1.00    4.44  275.   10.0  281.4    2.0
 17 01 01   1 21  -25.7  0.256 -9.000 -9.000 -999.  310.     71.8  0.01   0.54
1.00    4.53  244.   10.0  280.9    2.0
 17 01 01   1 22  -25.4  0.253 -9.000 -9.000 -999.  305.     70.2  0.01   0.54
1.00    4.48  244.   10.0  280.9    2.0
 17 01 01   1 23  -25.2  0.250 -9.000 -9.000 -999.  300.     68.9  0.01   0.54
1.00    4.44  218.   10.0  280.4    2.0
 17 01 01   1 24  -20.2  0.200 -9.000 -9.000 -999.  215.     43.9  0.01   0.54
1.00    3.58  221.   10.0  279.2    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01   10.0 1  201.    4.36   281.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)									
	627895.44	627944.02	627992.60	628041.18	628089.76	628138.34	628186.92	628235.50	628284.08
4271915.92	0.67127	0.72146	0.77744	0.84116	0.91249	0.99247	1.08293	1.18463	1.29830
4271893.02	0.68001	0.73168	0.78965	0.85447	0.92789	1.01156	1.10563	1.21210	1.33198
4271870.12	0.68877	0.74182	0.80136	0.86854	0.94436	1.03035	1.12802	1.23983	1.36657
4271847.22	0.69751	0.75201	0.81316	0.88232	0.96085	1.04994	1.15139	1.26792	1.40092
4271824.32	0.70633	0.76219	0.82510	0.89630	0.97728	1.06982	1.17573	1.29658	1.43590
4271801.42	0.71523	0.77250	0.83712	0.91040	0.99398	1.08978	1.19993	1.32691	1.47327
4271778.52	0.72410	0.78282	0.84919	0.92466	1.01085	1.11002	1.22440	1.35688	1.51074
4271755.62	0.73300	0.79304	0.86121	0.93894	1.02791	1.13045	1.24920	1.38734	1.54879
4271732.72	0.74174	0.80336	0.87327	0.95320	1.04500	1.15107	1.27427	1.41836	1.58756
4271709.82	0.75036	0.81355	0.88539	0.96755	1.06212				

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628575.56    628624.14    628672.72    628721.30
 - - -
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)		
	628769.88	628818.46	628867.04
4271915.92	3.53615	3.84848	4.16389
4271893.02	3.76701	4.11552	4.46842
4271870.12	4.02260	4.41354	4.81082
4271847.22	4.30735	4.74699	5.19623
4271824.32	4.62563	5.12254	5.63425
4271801.42	4.98352	5.54893	6.13406
4271778.52	5.38647	6.03495	6.70671
4271755.62	5.84345	6.59398	7.37356
4271732.72	6.36701	7.24018	8.15141
4271709.82	6.96654	7.99317	9.06323
4271686.92	7.65012	8.87724	10.14556
4271664.02	8.46623	9.90594	11.43596
4271641.12	9.43140	11.17757	13.00579
4271618.22	10.55641	12.72405	14.96050
4271595.32	11.93091	14.62133	17.40012
4271572.42	13.59954	17.01090	20.49874
4271549.52	15.66141	20.07496	24.52500
4271526.62	18.26037	24.10038	29.87852
4271503.72	21.61465	29.54568	37.19959
4271480.82	26.06426	37.19136	47.50557
4271457.92	32.18156	48.39537	62.57773

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***

INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
628831.60	4271107.50	21.18285	628846.85	4271117.16	21.56788
628859.38	4271124.89	21.61757	628876.69	4271136.68	21.52024
628888.11	4271144.78	21.29628	628908.00	4271152.89	19.67246
628920.89	4271161.73	18.93000	628938.20	4271170.57	17.38969
628950.35	4271179.41	16.53363	628981.29	4271202.24	14.35498
628991.61	4271209.98	13.68179	629008.92	4271223.24	12.65296
629020.71	4271232.45	12.02429	629037.65	4271245.71	11.20460
629048.70	4271256.02	10.78958	628863.15	4271085.64	16.15657
628885.22	4271099.20	15.92974	628910.22	4271106.07	14.50716
628956.15	4271132.05	12.44414	628978.86	4271145.95	11.37098
629005.83	4271164.41	10.22639	629037.13	4271190.70	9.17084
629066.19	4271209.06	8.14676			

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)				
	627895.44	627944.02	627992.60	628041.18	628089.76
4271915.9	29.17812 (17021418)	30.75768 (17021418)	31.52329 (17021418)	33.02914 (17012718)	34.55126 (17012321)
4271893.0	28.97684 (17021418)	31.14808 (17021418)	32.60482 (17021418)	33.61225 (17012718)	34.99060 (17012718)
4271870.1	29.35272 (17012306)	31.11676 (17021418)	33.25241 (17021418)	34.52843 (17021418)	35.96787 (17012718)
4271847.2	29.87614 (17012306)	31.09584 (17012306)	33.43483 (17021418)	35.49302 (17021418)	36.51836 (17021418)
4271824.3	31.40981 (17122617)	31.80420 (17012306)	33.13247 (17021418)	35.95133 (17021418)	37.87360 (17021418)
4271801.4	32.86937 (17122617)	33.23782 (17122617)	33.91554 (17012306)	35.85979 (17021418)	38.67587 (17021418)
4271778.5	33.82380 (17122617)	34.91061 (17122617)	35.24037 (17122617)	36.23269 (17012306)	38.86050 (17021418)
4271755.6	34.21831 (17122617)	36.01538 (17122617)	37.15720 (17122617)	37.44965 (17122617)	38.78006 (17012306)
4271732.7	34.00523 (17122617)	36.49953 (17122617)	38.45599 (17122617)	39.66487 (17122617)	39.89416 (17122617)
4271709.8	33.19014 (17122617)	36.30558 (17122617)	39.05317 (17122617)		

```
   41.19479 (17122617)     42.46885 (17122617)
 4271686.9 |     33.66266 (17121717)     35.42622 (17122617)     38.87058 (17122617)
   41.90863 (17122617)     44.26264 (17122617)
 4271664.0 |     33.63940 (17121717)     35.94714 (17121717)     37.91743 (17122617)
   41.74897 (17122617)     45.13240 (17122617)
 4271641.1 |     33.33987 (17122017)     35.82921 (17121717)     38.48880 (17121717)
   40.78480 (17121717)     44.98497 (17122617)
 4271618.2 |     35.18615 (17122017)     36.21187 (17122017)     38.26435 (17121717)
   41.33711 (17121717)     44.05217 (17121717)
 4271595.3 |     36.36226 (17122017)     38.02527 (17122017)     39.42464 (17122017)
   40.97224 (17121717)     44.55625 (17121717)
 4271572.4 |     36.79011 (17122017)     39.05359 (17122017)     41.16709 (17122017)
   43.01904 (17122017)     44.49758 (17122017)
 4271549.5 |     36.42704 (17122017)     39.21132 (17122017)     41.97000 (17122017)
   44.61788 (17122017)     47.04503 (17122017)
 4271526.6 |     37.09507 (17121117)     38.99061 (17121117)     41.78246 (17122017)
   45.12512 (17122017)     48.42418 (17122017)
 4271503.7 |     37.48537 (17121117)     39.88567 (17121117)     42.31498 (17121117)
   44.70514 (17121117)     48.50646 (17122017)
 4271480.8 |     37.01006 (17121117)     39.81634 (17121117)     42.76050 (17121117)
   45.78788 (17121117)     48.86406 (17121117)
 4271457.9 |     35.69514 (17121117)     38.78101 (17121117)     42.09544 (17121117)
   45.62336 (17121117)     49.37459 (17121117)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        16:20:37

                                 PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                                 INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005    ,
                 L0000006    , L0000007    , L0000008    , L0000009    , L0000010
, L0000011    , L0000012    , L0000013    ,
                 L0000014    , L0000015    , L0000016    , L0000017    , L0000018
, L0000019    , L0000020    , L0000021    ,
                 L0000022    , L0000023    , L0000024    , L0000025    , L0000026
, L0000027    , L0000028    ,  . . .      ,

                                 *** NETWORK ID: UCART1   ;  NETWORK TYPE:
GRIDCART ***

                                      ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

  Y-COORD  |                                                  X-COORD (METERS)
  (METERS) |       628138.34              628186.92              628235.50
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      628284.08              628332.66
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```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 628381.24	628429.82	628478.40	628526.98	628575.56
4271915.9	46.18824 (17021808)	49.31006 (17010717)	55.41651 (17010717)	56.94282 (17011201)	59.09712 (17020223)
4271893.0	46.79273 (17021808)	49.88934 (17120518)	56.67909 (17010717)	58.71292 (17011201)	61.84871 (17020223)
4271870.1	47.33129 (17121408)	51.63729 (17021808)	57.52266 (17010717)	61.48985 (17010717)	64.43174 (17020223)
4271847.2	48.10954 (17011418)	52.95617 (17021808)	57.89337 (17010717)	64.03995 (17010717)	66.78995 (17020223)
4271824.3	50.26320 (17020201)	53.75366 (17021808)	57.78420 (17120518)	66.19025 (17010717)	68.85971 (17020223)
4271801.4	52.18558 (17021007)	54.37220 (17121408)	59.85738 (17021808)	67.84968 (17010717)	71.16049 (17011201)
4271778.5	54.51226 (17021007)	56.04850 (17020201)	61.60921 (17021808)	68.91996 (17010717)	74.64807 (17010717)
4271755.6	56.10303 (17021007)	58.65888 (17020201)	62.68886 (17021808)	69.30732 (17010717)	78.17568 (17010717)
4271732.7	57.68562 (17011105)	61.46609 (17021007)	63.41879 (17121408)	70.60941 (17021808)	81.16317 (17010717)
4271709.8	59.56435 (17021219)	63.69172 (17021007)	66.62851 (17020201)	73.07558 (17021808)	83.48956 (17010717)
4271686.9	61.51710 (17021219)	65.61150 (17122417)	70.02845 (17021007)	74.61032 (17021808)	84.95702 (17010717)
4271664.0	62.59228 (17012321)	67.97831 (17021219)	73.17926 (17021007)		

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS)
628624.14	628672.72
628721.30	628769.88
628818.46	

- - - -

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 4271915.9 |     61.40676 (17012322)     62.89925 (17010302)     63.80379 (17012224)
    66.66074 (17020222)     72.57965 (17020804)
 4271893.0 |     63.96024 (17012322)     65.14155 (17010302)     66.79641 (17012224)
    69.64658 (17020222)     75.77013 (17020804)
 4271870.1 |     66.43601 (17012322)     67.38981 (17010302)     69.93828 (17012224)
    72.83277 (17020222)     79.21563 (17020506)
 4271847.2 |     68.79990 (17012322)     69.62212 (17010302)     73.23440 (17012224)
    76.24316 (17020222)     82.98436 (17020506)
 4271824.3 |     71.00824 (17012322)     72.43521 (17012322)     76.69212 (17012224)
    79.89646 (17020222)     87.06032 (17020506)
 4271801.4 |     74.25184 (17020223)     76.65762 (17012322)     80.32156 (17012224)
    83.82063 (17020222)     91.48618 (17020506)
 4271778.5 |     78.32795 (17020223)     80.94615 (17012322)     84.12607 (17012224)
    88.03248 (17020222)     96.29982 (17020506)
 4271755.6 |     82.19648 (17020223)     85.26181 (17012322)     88.13892 (17010302)
    92.57031 (17020222)    101.55808 (17020506)
 4271732.7 |     85.74848 (17020223)     89.52784 (17012322)     92.73336 (17010302)
    97.48660 (17020222)    107.31302 (17020506)
 4271709.8 |     88.87971 (17020223)     93.69190 (17012322)     97.52421 (17010302)
   102.80385 (17020222)    113.63408 (17020506)
 4271686.9 |     93.59625 (17010717)     97.77769 (17012322)    102.46513 (17010302)
   108.51804 (17020222)    120.59796 (17020506)
 4271664.0 |     98.89019 (17010717)    104.17651 (17020223)    107.77366 (17010302)
   114.89809 (17020222)    128.19423 (17020506)
 4271641.1 |    103.45402 (17010717)    110.63997 (17020223)    113.96218 (17012322)
   121.93452 (17020222)    136.84497 (17020506)
 4271618.2 |    106.99628 (17010717)    116.83686 (17020223)    122.33098 (17012322)
   129.45337 (17020222)    146.60597 (17021518)
 4271595.3 |    109.19962 (17010717)    123.04401 (17010717)    131.11445 (17012322)
   139.26584 (17012224)    157.83296 (17021518)
 4271572.4 |    112.09965 (17021808)    132.00672 (17010717)    140.30562 (17012322)
   150.58826 (17012224)    170.71678 (17021518)
 4271549.5 |    115.96753 (17021808)    140.05133 (17010717)    150.32709 (17121317)
   163.42373 (17012224)    185.57776 (17021518)
 4271526.6 |    124.14569 (17021007)    146.46768 (17010717)    164.16513 (17121317)
   178.20151 (17012224)    202.94792 (17021518)
 4271503.7 |    132.37940 (17122417)    150.38869 (17010717)    178.47078 (17121317)
   195.42928 (17012224)    223.52979 (17021518)
 4271480.8 |    139.96785 (17021219)    157.98197 (17020201)    193.61505 (17010717)
   216.03801 (17011202)    248.30968 (17021518)
 4271457.9 |    147.70416 (17021418)    172.63790 (17021007)    211.63825 (17010717)
   241.77731 (17011202)    280.23376 (17122524)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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                                  PAGE  35
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** NETWORK ID: UCART1 ; NETWORK TYPE: GRIDCART ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

Y-COORD (METERS)	X-COORD (METERS) 628867.04
4271915.9	73.45530 (17012301)
4271893.0	76.66672 (17012301)
4271870.1	80.09704 (17012301)
4271847.2	84.04090 (17012302)
4271824.3	88.37921 (17012302)
4271801.4	93.03511 (17012302)
4271778.5	98.02845 (17012302)
4271755.6	103.44044 (17012319)
4271732.7	109.69271 (17020221)
4271709.8	117.07406 (17021419)
4271686.9	125.19452 (17021419)
4271664.0	133.96189 (17021419)
4271641.1	143.48521 (17021419)
4271618.2	153.90912 (17021419)
4271595.3	165.19964 (17021419)
4271572.4	177.42026 (17021419)
4271549.5	193.31463 (17012307)
4271526.6	212.82242 (17012307)
4271503.7	234.25062 (17012307)
4271480.8	264.19363 (17022208)
4271457.9	307.57512 (17022208)

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
628831.60	4271107.50	192.17607	(17012724)	628846.85	4271117.16	195.09266	(17021101)
628859.38	4271124.89	199.41116	(17021703)	628876.69	4271136.68	200.17436	(17021505)
628888.11	4271144.78	209.73862	(17010523)	628908.00	4271152.89	208.23808	(17010523)
628920.89	4271161.73	207.08070	(17021624)	628938.20	4271170.57	206.17783	(17012605)
628950.35	4271179.41	204.73227	(17021319)	628981.29	4271202.24	195.82859	(17021108)
628991.61	4271209.98	186.82409	(17022602)	629008.92	4271223.24	179.19090	(17022602)
629020.71	4271232.45	172.58177	(17122323)	629037.65	4271245.71	168.25585	(17021304)
629048.70	4271256.02	163.43943	(17021304)	628863.15	4271085.64	169.69018	(17021101)
628885.22	4271099.20	170.52349	(17122318)	628910.22	4271106.07	173.98710	(17010523)
628956.15	4271132.05	171.48030	(17120701)	628978.86	4271145.95	169.98789	(17012605)
629005.83	4271164.41	166.17662	(17021108)	629037.13	4271190.70	155.88894	(17021023)
629066.19	4271209.06	144.28940	(17021023)				

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

GROUP ID	NETWORK	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	62.57773	AT (628867.04, 4271457.92, 5.30, 5.30, 0.00)	GC	UCART1
	2ND HIGHEST VALUE IS	48.39537	AT (628818.46, 4271457.92, 5.10, 5.10, 0.00)	GC	UCART1
	3RD HIGHEST VALUE IS	47.50557	AT (628867.04, 4271480.82, 5.30, 5.30, 0.00)	GC	UCART1
	4TH HIGHEST VALUE IS	37.19959	AT (628867.04, 4271503.72, 5.20, 5.20, 0.00)	GC	UCART1
	5TH HIGHEST VALUE IS	37.19136	AT (628818.46, 4271480.82, 5.10, 5.10, 0.00)	GC	UCART1
	6TH HIGHEST VALUE IS	32.18156	AT (628769.88, 4271457.92, 5.10, 5.10, 0.00)	GC	UCART1
	7TH HIGHEST VALUE IS	29.87852	AT (628867.04, 4271526.62, 5.10, 5.10, 0.00)	GC	UCART1
	8TH HIGHEST VALUE IS	29.54568	AT (628818.46, 4271503.72, 5.10, 5.10, 0.00)	GC	UCART1
	9TH HIGHEST VALUE IS	26.06426	AT (628769.88, 4271480.82, 5.10, 5.10, 0.00)	GC	UCART1
	10TH HIGHEST VALUE IS	24.52500	AT (628867.04, 4271549.52, 5.10, 5.10, 0.00)	GC	UCART1

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	307.57512	ON 17022208: AT (628867.04, 4271457.92, 5.30, 5.30, 0.00)	GC	UCART1

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 251 Informational Message(s)

A Total of 8760 Hours Were Processed

A Total of 58 Calm Hours Identified

A Total of 193 Missing Hours Identified (2.20 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

```
   ********   WARNING MESSAGES   ********
ME W186     799       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187     799       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                          ***   MODEL SETUP OPTIONS SUMMARY
 ***
 - - -

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  21112

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    33.20 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.7 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **File for Summary of Results:   CDR_Construction.sum

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                        *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                            (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
```

1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

                     METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 2017   1 1
 1
                                                          AND END DATE: 2017 12 31
24

                NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.

                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
CATEGORIES ***
                                                           (METERS/SEC)

                                                  1.54,   3.09,   5.14,   8.23,
10.80,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file: KVCB_724828_93241\724828_2017-2021_AdjU.sfc
                Met Version: 21112
   Profile file: KVCB_724828_93241\724828_2017-2021_AdjU.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   93241   Upper air station no.:   23230
                 Name: NUT_TREE_AIRPORT   Name:

OAKLAND/WSO_AP

Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-25.0	0.249	-9.000	-9.000	-999.	298.	68.0	0.01	0.54	1.00	4.36	201.	10.0	280.9	2.0
17	01	01	1	02	-36.6	0.365	-9.000	-9.000	-999.	530.	146.7	0.01	0.54	1.00	6.38	211.	10.0	281.4	2.0
17	01	01	1	03	-31.6	0.315	-9.000	-9.000	-999.	425.	108.8	0.01	0.54	1.00	5.53	214.	10.0	280.9	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	184.	32.4	0.01	0.54	1.00	3.18	305.	10.0	276.4	2.0
17	01	01	1	05	-8.6	0.120	-9.000	-9.000	-999.	101.	18.1	0.03	0.54	1.00	1.93	1.	10.0	274.9	2.0
17	01	01	1	06	-10.8	0.135	-9.000	-9.000	-999.	119.	20.6	0.03	0.54	1.00	2.15	11.	10.0	275.9	2.0
17	01	01	1	07	-12.0	0.140	-9.000	-9.000	-999.	126.	21.7	0.02	0.54	1.00	2.42	357.	10.0	276.4	2.0
17	01	01	1	08	-9.7	0.125	-9.000	-9.000	-999.	107.	18.4	0.02	0.54	1.00	2.18	342.	10.0	277.0	2.0
17	01	01	1	09	2.6	0.104	0.208	0.005	124.	81.	-39.5	0.03	0.54	0.41	1.38	29.	10.0	277.5	2.0
17	01	01	1	10	4.4	0.119	0.349	0.005	350.	99.	-35.3	0.02	0.54	0.28	1.72	356.	10.0	279.2	2.0
17	01	01	1	11	10.9	0.164	0.564	0.005	592.	159.	-36.3	0.03	0.54	0.23	2.15	1.	10.0	280.9	2.0
17	01	01	1	12	14.5	0.165	0.676	0.017	768.	161.	-28.0	0.03	0.54	0.22	2.13	12.	10.0	281.4	2.0
17	01	01	1	13	72.0	0.177	1.253	0.019	985.	179.	-6.9	0.03	0.54	0.22	2.08	143.	10.0	282.5	2.0
17	01	01	1	14	65.1	0.167	1.252	0.020	1084.	163.	-6.4	0.01	0.54	0.23	2.21	191.	10.0	284.9	2.0
17	01	01	1	15	39.8	0.254	1.063	0.019	1086.	306.	-36.8	0.01	0.54	0.26	3.86	199.	10.0	284.2	2.0
17	01	01	1	16	9.4	0.267	0.658	0.019	1087.	331.	-181.8	0.01	0.54	0.34	4.32	200.	10.0	284.9	2.0
17	01	01	1	17	-25.4	0.289	-9.000	-9.000	-999.	373.	92.1	0.01	0.54	0.59	5.09	248.	10.0	283.1	2.0
17	01	01	1	18	-23.3	0.233	-9.000	-9.000	-999.	272.	59.9	0.01	0.54	1.00	4.15	234.	10.0	282.0	2.0
17	01	01	1	19	-21.2	0.212	-9.000	-9.000	-999.	234.	49.3	0.01	0.54	1.00	3.78	228.	10.0	281.4	2.0
17	01	01	1	20	-24.8	0.247	-9.000	-9.000	-999.	295.	67.1	0.01	0.54	1.00	4.44	275.	10.0	281.4	2.0
17	01	01	1	21	-25.7	0.256	-9.000	-9.000	-999.	310.	71.8	0.01	0.54	1.00	4.53	244.	10.0	280.9	2.0

```
 17 01 01   1 22  -25.4  0.253 -9.000 -9.000 -999.  305.     70.2  0.01   0.54
1.00    4.48  244.   10.0  280.9    2.0
 17 01 01   1 23  -25.2  0.250 -9.000 -9.000 -999.  300.     68.9  0.01   0.54
1.00    4.44  218.   10.0  280.4    2.0
 17 01 01   1 24  -20.2  0.200 -9.000 -9.000 -999.  215.     43.9  0.01   0.54
1.00    3.58  221.   10.0  279.2    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01   10.0 1  201.    4.36   281.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                       *** THE SUMMARY OF MAXIMUM PERIOD (  8760
HRS) RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **


                        NETWORK
GROUP ID                       AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS      62.57773 AT (  628867.04,  4271457.92,     5.30,
    5.30,    0.00)  GC  UCART1
          2ND HIGHEST VALUE IS      48.39537 AT (  628818.46,  4271457.92,     5.10,
    5.10,    0.00)  GC  UCART1
          3RD HIGHEST VALUE IS      47.50557 AT (  628867.04,  4271480.82,     5.30,
    5.30,    0.00)  GC  UCART1
          4TH HIGHEST VALUE IS      37.19959 AT (  628867.04,  4271503.72,     5.20,
    5.20,    0.00)  GC  UCART1
          5TH HIGHEST VALUE IS      37.19136 AT (  628818.46,  4271480.82,     5.10,
    5.10,    0.00)  GC  UCART1
          6TH HIGHEST VALUE IS      32.18156 AT (  628769.88,  4271457.92,     5.10,
    5.10,    0.00)  GC  UCART1
          7TH HIGHEST VALUE IS      29.87852 AT (  628867.04,  4271526.62,     5.10,
    5.10,    0.00)  GC  UCART1
          8TH HIGHEST VALUE IS      29.54568 AT (  628818.46,  4271503.72,     5.10,
```

```
    5.10,    0.00)  GC  UCART1
          9TH HIGHEST VALUE IS      26.06426 AT (  628769.88,  4271480.82,     5.10,
    5.10,    0.00)  GC  UCART1
         10TH HIGHEST VALUE IS      24.52500 AT (  628867.04,  4271549.52,     5.10,
    5.10,    0.00)  GC  UCART1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **

                                                        DATE
                                       NETWORK
GROUP ID                            AVERAGE CONC     (YYMMDDHH)             RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS     307.57512  ON 17022208: AT (  628867.04,
4271457.92,     5.30,     5.30,    0.00)  GC  UCART1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
↑ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        16:20:37

                                  PAGE   6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***
```

--------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   2 Warning Message(s)
A Total of   251 Informational Message(s)

A Total of   8760 Hours Were Processed

A Total of   58 Calm Hours Identified

A Total of   193 Missing Hours Identified (2.20 Percent)

   ******** FATAL ERROR MESSAGES ********
              *** NONE ***

   ********   WARNING MESSAGES   ********
ME W186   799   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187   799   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

HARP2 - HRACalc (dated 22118) 5/28/2024 4:45:23 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2.74

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0.74
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Unmit_Cancer_Risk_OffsiteNCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/28/2024 4:48:23 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2.74

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0.74
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_OFFSITE_HARP2\hra\Mit_Cancer_Risk_OffsiteNCAcuteRiskSumByRec.csv
HRA ran successfully

```
**
**************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 12.0.0
** Lakes Environmental Software Inc.
** Date: 5/28/2024
** File: C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction_Onsite\CDR_Construction_Onsite.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_Construction\
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 220544 US_Census_2022_-_Yolo_County_Population
   POLLUTID PM_10
   RUNORNOT RUN
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
** ----------------------------------------------------------------------
** Line Source Represented by Adjacent Volume Sources
** LINE VOLUME Source ID = SLINE1
** DESCRSRC Construction Equipment and Trucks
** PREFIX
** Length of Side = 10.00
** Configuration = Adjacent
** Emission Rate = 1.0
** Vertical Dimension = 10.00
** SZINIT = 4.65
** Nodes = 39
** 628747.723, 4271364.200, 4.90, 5.00, 4.65
** 628665.576, 4271137.128, 4.96, 5.00, 4.65
** 628900.662, 4271252.667, 5.16, 5.00, 4.65
** 628927.376, 4271428.314, 5.35, 5.00, 4.65
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** 628765.087, 4271375.553, 4.81, 5.00, 4.65
** 628699.637, 4271172.524, 4.72, 5.00, 4.65
** 628881.962, 4271256.675, 5.15, 5.00, 4.65
** 628907.341, 4271416.293, 5.23, 5.00, 4.65
** 628772.433, 4271369.542, 4.81, 5.00, 4.65
** 628726.351, 4271206.585, 4.77, 5.00, 4.65
** 628865.266, 4271263.353, 5.10, 5.00, 4.65
** 628887.973, 4271401.600, 5.19, 5.00, 4.65
** 628779.112, 4271364.200, 4.93, 5.00, 4.65
** 628753.066, 4271273.371, 4.93, 5.00, 4.65
** 628819.851, 4271255.339, 5.04, 5.00, 4.65
** 628873.280, 4271383.567, 5.23, 5.00, 4.65
** 628792.469, 4271359.525, 4.89, 5.00, 4.65
** 628767.091, 4271294.075, 4.89, 5.00, 4.65
** 628762.358, 4271281.819, 4.93, 5.00, 4.65
** 628815.106, 4271264.928, 4.97, 5.00, 4.65
** 628853.037, 4271363.905, 5.06, 5.00, 4.65
** 628799.400, 4271352.940, 4.99, 5.00, 4.65
** 628773.618, 4271287.153, 4.90, 5.00, 4.65
** 628811.253, 4271274.411, 4.95, 5.00, 4.65
** 628835.553, 4271349.088, 5.00, 5.00, 4.65
** 628800.585, 4271340.494, 4.98, 5.00, 4.65
** 628780.138, 4271290.709, 4.89, 5.00, 4.65
** 628807.697, 4271281.523, 4.95, 5.00, 4.65
** 628823.996, 4271329.233, 5.00, 5.00, 4.65
** 628802.659, 4271335.753, 4.96, 5.00, 4.65
** 628786.657, 4271293.673, 4.89, 5.00, 4.65
** 628785.472, 4271292.784, 4.89, 5.00, 4.65
** 628804.141, 4271287.450, 4.96, 5.00, 4.65
** 628817.773, 4271325.381, 4.94, 5.00, 4.65
** 628804.437, 4271329.530, 4.89, 5.00, 4.65
** 628791.991, 4271295.747, 4.90, 5.00, 4.65
** 628802.067, 4271293.080, 4.96, 5.00, 4.65
** 628813.031, 4271323.603, 4.92, 5.00, 4.65
** 628807.105, 4271324.788, 4.90, 5.00, 4.65
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   LOCATION L0000001     VOLUME   628746.022 4271359.498 4.82
   LOCATION L0000002     VOLUME   628742.620 4271350.094 4.84
   LOCATION L0000003     VOLUME   628739.218 4271340.691 4.86
   LOCATION L0000004     VOLUME   628735.816 4271331.287 4.87
   LOCATION L0000005     VOLUME   628732.414 4271321.884 4.88
   LOCATION L0000006     VOLUME   628729.012 4271312.480 4.89
   LOCATION L0000007     VOLUME   628725.610 4271303.076 4.92
   LOCATION L0000008     VOLUME   628722.209 4271293.673 4.94
   LOCATION L0000009     VOLUME   628718.807 4271284.269 4.96
   LOCATION L0000010     VOLUME   628715.405 4271274.866 4.94
   LOCATION L0000011     VOLUME   628712.003 4271265.462 4.92
   LOCATION L0000012     VOLUME   628708.601 4271256.059 4.91
   LOCATION L0000013     VOLUME   628705.199 4271246.655 4.89
   LOCATION L0000014     VOLUME   628701.797 4271237.251 4.86
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LOCATION L0000015 VOLUME 628698.395 4271227.848 4.83
LOCATION L0000016 VOLUME 628694.994 4271218.444 4.81
LOCATION L0000017 VOLUME 628691.592 4271209.041 4.80
LOCATION L0000018 VOLUME 628688.190 4271199.637 4.80
LOCATION L0000019 VOLUME 628684.788 4271190.233 4.81
LOCATION L0000020 VOLUME 628681.386 4271180.830 4.76
LOCATION L0000021 VOLUME 628677.984 4271171.426 4.70
LOCATION L0000022 VOLUME 628674.582 4271162.023 4.65
LOCATION L0000023 VOLUME 628671.180 4271152.619 4.74
LOCATION L0000024 VOLUME 628667.779 4271143.216 4.87
LOCATION L0000025 VOLUME 628668.741 4271138.683 4.94
LOCATION L0000026 VOLUME 628677.716 4271143.094 4.95
LOCATION L0000027 VOLUME 628686.690 4271147.505 4.92
LOCATION L0000028 VOLUME 628695.665 4271151.916 4.84
LOCATION L0000029 VOLUME 628704.640 4271156.327 4.72
LOCATION L0000030 VOLUME 628713.614 4271160.738 4.68
LOCATION L0000031 VOLUME 628722.589 4271165.148 4.78
LOCATION L0000032 VOLUME 628731.564 4271169.559 4.83
LOCATION L0000033 VOLUME 628740.538 4271173.970 4.85
LOCATION L0000034 VOLUME 628749.513 4271178.381 4.83
LOCATION L0000035 VOLUME 628758.487 4271182.792 4.77
LOCATION L0000036 VOLUME 628767.462 4271187.203 4.73
LOCATION L0000037 VOLUME 628776.437 4271191.613 4.70
LOCATION L0000038 VOLUME 628785.411 4271196.024 4.81
LOCATION L0000039 VOLUME 628794.386 4271200.435 4.89
LOCATION L0000040 VOLUME 628803.361 4271204.846 4.92
LOCATION L0000041 VOLUME 628812.335 4271209.257 4.92
LOCATION L0000042 VOLUME 628821.310 4271213.668 4.91
LOCATION L0000043 VOLUME 628830.285 4271218.078 4.91
LOCATION L0000044 VOLUME 628839.259 4271222.489 4.95
LOCATION L0000045 VOLUME 628848.234 4271226.900 5.04
LOCATION L0000046 VOLUME 628857.209 4271231.311 5.10
LOCATION L0000047 VOLUME 628866.183 4271235.722 5.13
LOCATION L0000048 VOLUME 628875.158 4271240.133 5.17
LOCATION L0000049 VOLUME 628884.133 4271244.544 5.18
LOCATION L0000050 VOLUME 628893.107 4271248.954 5.18
LOCATION L0000051 VOLUME 628900.900 4271254.231 5.17
LOCATION L0000052 VOLUME 628902.404 4271264.118 5.16
LOCATION L0000053 VOLUME 628903.907 4271274.004 5.14
LOCATION L0000054 VOLUME 628905.411 4271283.890 5.12
LOCATION L0000055 VOLUME 628906.915 4271293.777 5.13
LOCATION L0000056 VOLUME 628908.418 4271303.663 5.15
LOCATION L0000057 VOLUME 628909.922 4271313.549 5.17
LOCATION L0000058 VOLUME 628911.425 4271323.436 5.19
LOCATION L0000059 VOLUME 628912.929 4271333.322 5.22
LOCATION L0000060 VOLUME 628914.433 4271343.208 5.25
LOCATION L0000061 VOLUME 628915.936 4271353.095 5.27
LOCATION L0000062 VOLUME 628917.440 4271362.981 5.26
LOCATION L0000063 VOLUME 628918.943 4271372.867 5.26
LOCATION L0000064 VOLUME 628920.447 4271382.754 5.27

LOCATION L0000065 VOLUME 628921.951 4271392.640 5.28
LOCATION L0000066 VOLUME 628923.454 4271402.526 5.28
LOCATION L0000067 VOLUME 628924.958 4271412.412 5.30
LOCATION L0000068 VOLUME 628926.462 4271422.299 5.33
LOCATION L0000069 VOLUME 628923.653 4271427.103 5.34
LOCATION L0000070 VOLUME 628914.143 4271424.012 5.30
LOCATION L0000071 VOLUME 628904.633 4271420.920 5.26
LOCATION L0000072 VOLUME 628895.122 4271417.828 5.23
LOCATION L0000073 VOLUME 628885.612 4271414.736 5.20
LOCATION L0000074 VOLUME 628876.102 4271411.645 5.17
LOCATION L0000075 VOLUME 628866.592 4271408.553 5.14
LOCATION L0000076 VOLUME 628857.082 4271405.461 5.11
LOCATION L0000077 VOLUME 628847.572 4271402.369 5.08
LOCATION L0000078 VOLUME 628838.062 4271399.278 5.08
LOCATION L0000079 VOLUME 628828.552 4271396.186 5.08
LOCATION L0000080 VOLUME 628819.042 4271393.094 5.07
LOCATION L0000081 VOLUME 628809.532 4271390.002 5.06
LOCATION L0000082 VOLUME 628800.022 4271386.911 5.04
LOCATION L0000083 VOLUME 628790.512 4271383.819 5.02
LOCATION L0000084 VOLUME 628781.002 4271380.727 4.99
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** Source Parameters **
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   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST CDR_CONSTRUCTION_ONSITE.AD\01H1GALL.PLT 31
   PLOTFILE PERIOD ALL CDR_CONSTRUCTION_ONSITE.AD\PE00GALL.PLT 32
   SUMMFILE CDR_Construction_Onsite.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186     799       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     799       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        15:52:44

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

```
- - - - - - - - - - - - - - - - - - - -

 ** Model Options Selected:
      * Model Uses Regulatory DEFAULT Options
      * Model Is Setup For Calculation of Average CONCentration Values.
      * NO GAS DEPOSITION Data Provided.
      * NO PARTICLE DEPOSITION Data Provided.
      * Model Uses NO DRY DEPLETION. DDPLETE  =  F
      * Model Uses NO WET DEPLETION. WETDPLT  =  F
      * Stack-tip Downwash.
      * Model Accounts for ELEVated Terrain Effects.
      * Use Calms Processing Routine.
      * Use Missing Data Processing Routine.
      * No Exponential Decay.
      * Model Uses URBAN Dispersion Algorithm for the SBL for   342 Source(s),
        for Total of    1 Urban Area(s):
   Urban Population =    220544.0 ;  Urban Roughness Length =  1.000 m
      * Urban Roughness Length of 1.0 Meter Used.
      * ADJ_U*   - Use ADJ_U* option for SBL in AERMET
      * CCVR_Sub - Meteorological data includes CCVR substitutions
      * TEMP_Sub - Meteorological data includes TEMP substitutions
      * Model Assumes No FLAGPOLE Receptor Heights.
      * The User Specified a Pollutant Type of: PM_10

 **Model Calculates  1 Short Term Average(s) of:   1-HR
     and Calculates PERIOD Averages

 **This Run Includes:    342 Source(s);       1 Source Group(s); and      18
Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:    342 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with a total of     0 line(s)
                 and:      0 SWPOINT source(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  21112

 **Output Options Selected:
          Model Outputs Tables of PERIOD Averages by Receptor
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
```

Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   33.20 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **File for Summary of Results: CDR_Construction_Onsite.sum

 *** AERMOD - VERSION 23132 ***   *** C:\Users\enuno\OneDrive -
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                                *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE   AIRCRAFT
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- -

 L0000001   0   0.29240E-02 628746.0 4271359.5   4.8   5.00   4.65
4.65   YES   NO
 L0000002   0   0.29240E-02 628742.6 4271350.1   4.8   5.00   4.65
4.65   YES   NO
 L0000003   0   0.29240E-02 628739.2 4271340.7   4.9   5.00   4.65
4.65   YES   NO

L0000004	0	0.29240E-02	628735.8	4271331.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000005	0	0.29240E-02	628732.4	4271321.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000006	0	0.29240E-02	628729.0	4271312.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000007	0	0.29240E-02	628725.6	4271303.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000008	0	0.29240E-02	628722.2	4271293.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000009	0	0.29240E-02	628718.8	4271284.3	5.0	5.00	4.65	
4.65	YES	NO						
L0000010	0	0.29240E-02	628715.4	4271274.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000011	0	0.29240E-02	628712.0	4271265.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000012	0	0.29240E-02	628708.6	4271256.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000013	0	0.29240E-02	628705.2	4271246.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000014	0	0.29240E-02	628701.8	4271237.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000015	0	0.29240E-02	628698.4	4271227.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000016	0	0.29240E-02	628695.0	4271218.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000017	0	0.29240E-02	628691.6	4271209.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000018	0	0.29240E-02	628688.2	4271199.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000019	0	0.29240E-02	628684.8	4271190.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000020	0	0.29240E-02	628681.4	4271180.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000021	0	0.29240E-02	628678.0	4271171.4	4.7	5.00	4.65	
4.65	YES	NO						
L0000022	0	0.29240E-02	628674.6	4271162.0	4.6	5.00	4.65	
4.65	YES	NO						
L0000023	0	0.29240E-02	628671.2	4271152.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000024	0	0.29240E-02	628667.8	4271143.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000025	0	0.29240E-02	628668.7	4271138.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000026	0	0.29240E-02	628677.7	4271143.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000027	0	0.29240E-02	628686.7	4271147.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000028	0	0.29240E-02	628695.7	4271151.9	4.8	5.00	4.65	
4.65	YES	NO						

```
 L0000029         0   0.29240E-02  628704.6 4271156.3     4.7     5.00     4.65
4.65     YES                     NO
 L0000030         0   0.29240E-02  628713.6 4271160.7     4.7     5.00     4.65
4.65     YES                     NO
 L0000031         0   0.29240E-02  628722.6 4271165.1     4.8     5.00     4.65
4.65     YES                     NO
 L0000032         0   0.29240E-02  628731.6 4271169.6     4.8     5.00     4.65
4.65     YES                     NO
 L0000033         0   0.29240E-02  628740.5 4271174.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000034         0   0.29240E-02  628749.5 4271178.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000035         0   0.29240E-02  628758.5 4271182.8     4.8     5.00     4.65
4.65     YES                     NO
 L0000036         0   0.29240E-02  628767.5 4271187.2     4.7     5.00     4.65
4.65     YES                     NO
 L0000037         0   0.29240E-02  628776.4 4271191.6     4.7     5.00     4.65
4.65     YES                     NO
 L0000038         0   0.29240E-02  628785.4 4271196.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000039         0   0.29240E-02  628794.4 4271200.4     4.9     5.00     4.65
4.65     YES                     NO
 L0000040         0   0.29240E-02  628803.4 4271204.8     4.9     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000041         0   0.29240E-02  628812.3 4271209.3     4.9     5.00     4.65
4.65     YES                     NO
 L0000042         0   0.29240E-02  628821.3 4271213.7     4.9     5.00     4.65
4.65     YES                     NO
 L0000043         0   0.29240E-02  628830.3 4271218.1     4.9     5.00     4.65
4.65     YES                     NO
```

L0000044	0	0.29240E-02	628839.3	4271222.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000045	0	0.29240E-02	628848.2	4271226.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000046	0	0.29240E-02	628857.2	4271231.3	5.1	5.00	4.65	
4.65	YES	NO						
L0000047	0	0.29240E-02	628866.2	4271235.7	5.1	5.00	4.65	
4.65	YES	NO						
L0000048	0	0.29240E-02	628875.2	4271240.1	5.2	5.00	4.65	
4.65	YES	NO						
L0000049	0	0.29240E-02	628884.1	4271244.5	5.2	5.00	4.65	
4.65	YES	NO						
L0000050	0	0.29240E-02	628893.1	4271249.0	5.2	5.00	4.65	
4.65	YES	NO						
L0000051	0	0.29240E-02	628900.9	4271254.2	5.2	5.00	4.65	
4.65	YES	NO						
L0000052	0	0.29240E-02	628902.4	4271264.1	5.2	5.00	4.65	
4.65	YES	NO						
L0000053	0	0.29240E-02	628903.9	4271274.0	5.1	5.00	4.65	
4.65	YES	NO						
L0000054	0	0.29240E-02	628905.4	4271283.9	5.1	5.00	4.65	
4.65	YES	NO						
L0000055	0	0.29240E-02	628906.9	4271293.8	5.1	5.00	4.65	
4.65	YES	NO						
L0000056	0	0.29240E-02	628908.4	4271303.7	5.1	5.00	4.65	
4.65	YES	NO						
L0000057	0	0.29240E-02	628909.9	4271313.5	5.2	5.00	4.65	
4.65	YES	NO						
L0000058	0	0.29240E-02	628911.4	4271323.4	5.2	5.00	4.65	
4.65	YES	NO						
L0000059	0	0.29240E-02	628912.9	4271333.3	5.2	5.00	4.65	
4.65	YES	NO						
L0000060	0	0.29240E-02	628914.4	4271343.2	5.2	5.00	4.65	
4.65	YES	NO						
L0000061	0	0.29240E-02	628915.9	4271353.1	5.3	5.00	4.65	
4.65	YES	NO						
L0000062	0	0.29240E-02	628917.4	4271363.0	5.3	5.00	4.65	
4.65	YES	NO						
L0000063	0	0.29240E-02	628918.9	4271372.9	5.3	5.00	4.65	
4.65	YES	NO						
L0000064	0	0.29240E-02	628920.4	4271382.8	5.3	5.00	4.65	
4.65	YES	NO						
L0000065	0	0.29240E-02	628922.0	4271392.6	5.3	5.00	4.65	
4.65	YES	NO						
L0000066	0	0.29240E-02	628923.5	4271402.5	5.3	5.00	4.65	
4.65	YES	NO						
L0000067	0	0.29240E-02	628925.0	4271412.4	5.3	5.00	4.65	
4.65	YES	NO						
L0000068	0	0.29240E-02	628926.5	4271422.3	5.3	5.00	4.65	
4.65	YES	NO						

```
 L0000069         0   0.29240E-02  628923.7 4271427.1     5.3     5.00     4.65
4.65     YES                     NO
 L0000070         0   0.29240E-02  628914.1 4271424.0     5.3     5.00     4.65
4.65     YES                     NO
 L0000071         0   0.29240E-02  628904.6 4271420.9     5.3     5.00     4.65
4.65     YES                     NO
 L0000072         0   0.29240E-02  628895.1 4271417.8     5.2     5.00     4.65
4.65     YES                     NO
 L0000073         0   0.29240E-02  628885.6 4271414.7     5.2     5.00     4.65
4.65     YES                     NO
 L0000074         0   0.29240E-02  628876.1 4271411.6     5.2     5.00     4.65
4.65     YES                     NO
 L0000075         0   0.29240E-02  628866.6 4271408.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000076         0   0.29240E-02  628857.1 4271405.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000077         0   0.29240E-02  628847.6 4271402.4     5.1     5.00     4.65
4.65     YES                     NO
 L0000078         0   0.29240E-02  628838.1 4271399.3     5.1     5.00     4.65
4.65     YES                     NO
 L0000079         0   0.29240E-02  628828.6 4271396.2     5.1     5.00     4.65
4.65     YES                     NO
 L0000080         0   0.29240E-02  628819.0 4271393.1     5.1     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000081         0   0.29240E-02  628809.5 4271390.0     5.1     5.00     4.65
4.65     YES                     NO
 L0000082         0   0.29240E-02  628800.0 4271386.9     5.0     5.00     4.65
4.65     YES                     NO
 L0000083         0   0.29240E-02  628790.5 4271383.8     5.0     5.00     4.65
4.65     YES                     NO
```

L0000084	0	0.29240E-02	628781.0	4271380.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000085	0	0.29240E-02	628771.5	4271377.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000086	0	0.29240E-02	628764.1	4271372.4	4.9	5.00	4.65	
4.65	YES	NO						
L0000087	0	0.29240E-02	628761.0	4271362.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000088	0	0.29240E-02	628757.9	4271353.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000089	0	0.29240E-02	628754.9	4271343.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000090	0	0.29240E-02	628751.8	4271334.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000091	0	0.29240E-02	628748.7	4271324.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000092	0	0.29240E-02	628745.7	4271315.3	4.8	5.00	4.65	
4.65	YES	NO						
L0000093	0	0.29240E-02	628742.6	4271305.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000094	0	0.29240E-02	628739.5	4271296.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000095	0	0.29240E-02	628736.5	4271286.8	5.0	5.00	4.65	
4.65	YES	NO						
L0000096	0	0.29240E-02	628733.4	4271277.3	5.0	5.00	4.65	
4.65	YES	NO						
L0000097	0	0.29240E-02	628730.3	4271267.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000098	0	0.29240E-02	628727.3	4271258.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000099	0	0.29240E-02	628724.2	4271248.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000100	0	0.29240E-02	628721.1	4271239.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000101	0	0.29240E-02	628718.1	4271229.7	4.8	5.00	4.65	
4.65	YES	NO						
L0000102	0	0.29240E-02	628715.0	4271220.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000103	0	0.29240E-02	628711.9	4271210.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000104	0	0.29240E-02	628708.9	4271201.1	4.8	5.00	4.65	
4.65	YES	NO						
L0000105	0	0.29240E-02	628705.8	4271191.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000106	0	0.29240E-02	628702.7	4271182.1	4.7	5.00	4.65	
4.65	YES	NO						
L0000107	0	0.29240E-02	628699.7	4271172.6	4.7	5.00	4.65	
4.65	YES	NO						
L0000108	0	0.29240E-02	628708.7	4271176.7	4.7	5.00	4.65	
4.65	YES	NO						

```
 L0000109         0   0.29240E-02  628717.7 4271180.9     4.7     5.00     4.65
4.65     YES                     NO
 L0000110         0   0.29240E-02  628726.8 4271185.1     4.7     5.00     4.65
4.65     YES                     NO
 L0000111         0   0.29240E-02  628735.9 4271189.3     4.6     5.00     4.65
4.65     YES                     NO
 L0000112         0   0.29240E-02  628745.0 4271193.5     4.6     5.00     4.65
4.65     YES                     NO
 L0000113         0   0.29240E-02  628754.1 4271197.6     4.7     5.00     4.65
4.65     YES                     NO
 L0000114         0   0.29240E-02  628763.1 4271201.8     4.7     5.00     4.65
4.65     YES                     NO
 L0000115         0   0.29240E-02  628772.2 4271206.0     4.8     5.00     4.65
4.65     YES                     NO
 L0000116         0   0.29240E-02  628781.3 4271210.2     4.8     5.00     4.65
4.65     YES                     NO
 L0000117         0   0.29240E-02  628790.4 4271214.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000118         0   0.29240E-02  628799.5 4271218.6     4.8     5.00     4.65
4.65     YES                     NO
 L0000119         0   0.29240E-02  628808.5 4271222.8     4.7     5.00     4.65
4.65     YES                     NO
 L0000120         0   0.29240E-02  628817.6 4271227.0     4.8     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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 L0000121         0   0.29240E-02  628826.7 4271231.2     4.9     5.00     4.65
4.65     YES                     NO
 L0000122         0   0.29240E-02  628835.8 4271235.4     5.0     5.00     4.65
4.65     YES                     NO
 L0000123         0   0.29240E-02  628844.9 4271239.6     5.0     5.00     4.65
4.65     YES                     NO
```

```
 L0000124         0   0.29240E-02  628853.9 4271243.7     5.1     5.00     4.65
4.65     YES                   NO
 L0000125         0   0.29240E-02  628863.0 4271247.9     5.1     5.00     4.65
4.65     YES                   NO
 L0000126         0   0.29240E-02  628872.1 4271252.1     5.1     5.00     4.65
4.65     YES                   NO
 L0000127         0   0.29240E-02  628881.2 4271256.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000128         0   0.29240E-02  628883.4 4271265.7     5.2     5.00     4.65
4.65     YES                   NO
 L0000129         0   0.29240E-02  628885.0 4271275.6     5.2     5.00     4.65
4.65     YES                   NO
 L0000130         0   0.29240E-02  628886.5 4271285.5     5.2     5.00     4.65
4.65     YES                   NO
 L0000131         0   0.29240E-02  628888.1 4271295.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000132         0   0.29240E-02  628889.7 4271305.2     5.2     5.00     4.65
4.65     YES                   NO
 L0000133         0   0.29240E-02  628891.2 4271315.1     5.2     5.00     4.65
4.65     YES                   NO
 L0000134         0   0.29240E-02  628892.8 4271325.0     5.3     5.00     4.65
4.65     YES                   NO
 L0000135         0   0.29240E-02  628894.4 4271334.8     5.3     5.00     4.65
4.65     YES                   NO
 L0000136         0   0.29240E-02  628896.0 4271344.7     5.3     5.00     4.65
4.65     YES                   NO
 L0000137         0   0.29240E-02  628897.5 4271354.6     5.3     5.00     4.65
4.65     YES                   NO
 L0000138         0   0.29240E-02  628899.1 4271364.5     5.3     5.00     4.65
4.65     YES                   NO
 L0000139         0   0.29240E-02  628900.7 4271374.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000140         0   0.29240E-02  628902.2 4271384.2     5.2     5.00     4.65
4.65     YES                   NO
 L0000141         0   0.29240E-02  628903.8 4271394.1     5.2     5.00     4.65
4.65     YES                   NO
 L0000142         0   0.29240E-02  628905.4 4271404.0     5.2     5.00     4.65
4.65     YES                   NO
 L0000143         0   0.29240E-02  628907.0 4271413.8     5.2     5.00     4.65
4.65     YES                   NO
 L0000144         0   0.29240E-02  628900.2 4271413.8     5.2     5.00     4.65
4.65     YES                   NO
 L0000145         0   0.29240E-02  628890.8 4271410.6     5.2     5.00     4.65
4.65     YES                   NO
 L0000146         0   0.29240E-02  628881.3 4271407.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000147         0   0.29240E-02  628871.9 4271404.0     5.2     5.00     4.65
4.65     YES                   NO
 L0000148         0   0.29240E-02  628862.4 4271400.7     5.1     5.00     4.65
4.65     YES                   NO
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 L0000149         0   0.29240E-02  628853.0 4271397.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000150         0   0.29240E-02  628843.5 4271394.2     5.1     5.00     4.65
4.65     YES                     NO
 L0000151         0   0.29240E-02  628834.1 4271390.9     5.1     5.00     4.65
4.65     YES                     NO
 L0000152         0   0.29240E-02  628824.6 4271387.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000153         0   0.29240E-02  628815.2 4271384.4     5.0     5.00     4.65
4.65     YES                     NO
 L0000154         0   0.29240E-02  628805.8 4271381.1     5.0     5.00     4.65
4.65     YES                     NO
 L0000155         0   0.29240E-02  628796.3 4271377.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000156         0   0.29240E-02  628786.9 4271374.5     5.0     5.00     4.65
4.65     YES                     NO
 L0000157         0   0.29240E-02  628777.4 4271371.3     5.0     5.00     4.65
4.65     YES                     NO
 L0000158         0   0.29240E-02  628771.1 4271365.0     4.9     5.00     4.65
4.65     YES                     NO
 L0000159         0   0.29240E-02  628768.4 4271355.4     4.8     5.00     4.65
4.65     YES                     NO
 L0000160         0   0.29240E-02  628765.7 4271345.7     4.8     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        15:52:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
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 L0000161         0   0.29240E-02  628763.0 4271336.1     4.8     5.00     4.65
4.65     YES                     NO
 L0000162         0   0.29240E-02  628760.3 4271326.5     4.8     5.00     4.65
4.65     YES                     NO
 L0000163         0   0.29240E-02  628757.5 4271316.9     4.8     5.00     4.65
4.65     YES                     NO
```

L0000164	0	0.29240E-02	628754.8	4271307.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000165	0	0.29240E-02	628752.1	4271297.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000166	0	0.29240E-02	628749.4	4271288.0	4.9	5.00	4.65	
4.65	YES	NO						
L0000167	0	0.29240E-02	628746.7	4271278.4	4.9	5.00	4.65	
4.65	YES	NO						
L0000168	0	0.29240E-02	628743.9	4271268.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000169	0	0.29240E-02	628741.2	4271259.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000170	0	0.29240E-02	628738.5	4271249.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000171	0	0.29240E-02	628735.8	4271239.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000172	0	0.29240E-02	628733.0	4271230.3	4.8	5.00	4.65	
4.65	YES	NO						
L0000173	0	0.29240E-02	628730.3	4271220.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000174	0	0.29240E-02	628727.6	4271211.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000175	0	0.29240E-02	628731.3	4271208.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000176	0	0.29240E-02	628740.6	4271212.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000177	0	0.29240E-02	628749.9	4271216.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000178	0	0.29240E-02	628759.1	4271220.0	4.9	5.00	4.65	
4.65	YES	NO						
L0000179	0	0.29240E-02	628768.4	4271223.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000180	0	0.29240E-02	628777.6	4271227.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000181	0	0.29240E-02	628786.9	4271231.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000182	0	0.29240E-02	628796.1	4271235.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000183	0	0.29240E-02	628805.4	4271238.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000184	0	0.29240E-02	628814.7	4271242.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000185	0	0.29240E-02	628823.9	4271246.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000186	0	0.29240E-02	628833.2	4271250.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000187	0	0.29240E-02	628842.4	4271254.0	5.1	5.00	4.65	
4.65	YES	NO						
L0000188	0	0.29240E-02	628851.7	4271257.8	5.1	5.00	4.65	
4.65	YES	NO						

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 L0000189         0   0.29240E-02  628860.9 4271261.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000190         0   0.29240E-02  628866.1 4271268.6     5.2     5.00     4.65
4.65     YES                     NO
 L0000191         0   0.29240E-02  628867.8 4271278.5     5.2     5.00     4.65
4.65     YES                     NO
 L0000192         0   0.29240E-02  628869.4 4271288.3     5.2     5.00     4.65
4.65     YES                     NO
 L0000193         0   0.29240E-02  628871.0 4271298.2     5.2     5.00     4.65
4.65     YES                     NO
 L0000194         0   0.29240E-02  628872.6 4271308.1     5.2     5.00     4.65
4.65     YES                     NO
 L0000195         0   0.29240E-02  628874.2 4271317.9     5.2     5.00     4.65
4.65     YES                     NO
 L0000196         0   0.29240E-02  628875.9 4271327.8     5.2     5.00     4.65
4.65     YES                     NO
 L0000197         0   0.29240E-02  628877.5 4271337.7     5.2     5.00     4.65
4.65     YES                     NO
 L0000198         0   0.29240E-02  628879.1 4271347.5     5.2     5.00     4.65
4.65     YES                     NO
 L0000199         0   0.29240E-02  628880.7 4271357.4     5.2     5.00     4.65
4.65     YES                     NO
 L0000200         0   0.29240E-02  628882.3 4271367.3     5.2     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        15:52:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
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 L0000201         0   0.29240E-02  628884.0 4271377.2     5.2     5.00     4.65
4.65     YES                     NO
 L0000202         0   0.29240E-02  628885.6 4271387.0     5.2     5.00     4.65
4.65     YES                     NO
 L0000203         0   0.29240E-02  628887.2 4271396.9     5.2     5.00     4.65
4.65     YES                     NO
```

L0000204	0	0.29240E-02	628883.0	4271399.9	5.2	5.00	4.65	
4.65	YES	NO						
L0000205	0	0.29240E-02	628873.6	4271396.7	5.2	5.00	4.65	
4.65	YES	NO						
L0000206	0	0.29240E-02	628864.1	4271393.4	5.1	5.00	4.65	
4.65	YES	NO						
L0000207	0	0.29240E-02	628854.7	4271390.2	5.1	5.00	4.65	
4.65	YES	NO						
L0000208	0	0.29240E-02	628845.2	4271386.9	5.1	5.00	4.65	
4.65	YES	NO						
L0000209	0	0.29240E-02	628835.7	4271383.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000210	0	0.29240E-02	628826.3	4271380.4	5.0	5.00	4.65	
4.65	YES	NO						
L0000211	0	0.29240E-02	628816.8	4271377.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000212	0	0.29240E-02	628807.4	4271373.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000213	0	0.29240E-02	628797.9	4271370.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000214	0	0.29240E-02	628788.5	4271367.4	5.0	5.00	4.65	
4.65	YES	NO						
L0000215	0	0.29240E-02	628779.1	4271364.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000216	0	0.29240E-02	628776.3	4271354.5	4.9	5.00	4.65	
4.65	YES	NO						
L0000217	0	0.29240E-02	628773.6	4271344.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000218	0	0.29240E-02	628770.8	4271335.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000219	0	0.29240E-02	628768.1	4271325.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000220	0	0.29240E-02	628765.3	4271316.0	4.8	5.00	4.65	
4.65	YES	NO						
L0000221	0	0.29240E-02	628762.5	4271306.4	4.8	5.00	4.65	
4.65	YES	NO						
L0000222	0	0.29240E-02	628759.8	4271296.8	4.8	5.00	4.65	
4.65	YES	NO						
L0000223	0	0.29240E-02	628757.0	4271287.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000224	0	0.29240E-02	628754.3	4271277.6	4.9	5.00	4.65	
4.65	YES	NO						
L0000225	0	0.29240E-02	628758.5	4271271.9	4.9	5.00	4.65	
4.65	YES	NO						
L0000226	0	0.29240E-02	628768.2	4271269.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000227	0	0.29240E-02	628777.8	4271266.7	4.9	5.00	4.65	
4.65	YES	NO						
L0000228	0	0.29240E-02	628787.5	4271264.1	5.0	5.00	4.65	
4.65	YES	NO						

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 L0000229         0   0.29240E-02  628797.1 4271261.5     5.0     5.00     4.65
4.65     YES                     NO
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4.65     YES                     NO
 L0000231         0   0.29240E-02  628816.4 4271256.3     5.0     5.00     4.65
4.65     YES                     NO
 L0000232         0   0.29240E-02  628822.3 4271261.3     5.0     5.00     4.65
4.65     YES                     NO
 L0000233         0   0.29240E-02  628826.2 4271270.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000234         0   0.29240E-02  628830.0 4271279.8     5.1     5.00     4.65
4.65     YES                     NO
 L0000235         0   0.29240E-02  628833.9 4271289.0     5.1     5.00     4.65
4.65     YES                     NO
 L0000236         0   0.29240E-02  628837.7 4271298.2     5.1     5.00     4.65
4.65     YES                     NO
 L0000237         0   0.29240E-02  628841.6 4271307.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000238         0   0.29240E-02  628845.4 4271316.7     5.1     5.00     4.65
4.65     YES                     NO
 L0000239         0   0.29240E-02  628849.3 4271325.9     5.1     5.00     4.65
4.65     YES                     NO
 L0000240         0   0.29240E-02  628853.1 4271335.1     5.1     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        15:52:44

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000241         0   0.29240E-02  628856.9 4271344.4     5.1     5.00     4.65
4.65     YES                     NO
 L0000242         0   0.29240E-02  628860.8 4271353.6     5.1     5.00     4.65
4.65     YES                     NO
 L0000243         0   0.29240E-02  628864.6 4271362.8     5.2     5.00     4.65
4.65     YES                     NO
```

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 L0000244         0   0.29240E-02  628868.5 4271372.1     5.2     5.00     4.65
4.65     YES                   NO
 L0000245         0   0.29240E-02  628872.3 4271381.3     5.2     5.00     4.65
4.65     YES                   NO
 L0000246         0   0.29240E-02  628866.1 4271381.4     5.2     5.00     4.65
4.65     YES                   NO
 L0000247         0   0.29240E-02  628856.5 4271378.6     5.1     5.00     4.65
4.65     YES                   NO
 L0000248         0   0.29240E-02  628846.9 4271375.7     5.0     5.00     4.65
4.65     YES                   NO
 L0000249         0   0.29240E-02  628837.3 4271372.9     5.0     5.00     4.65
4.65     YES                   NO
 L0000250         0   0.29240E-02  628827.7 4271370.0     5.0     5.00     4.65
4.65     YES                   NO
 L0000251         0   0.29240E-02  628818.1 4271367.2     5.0     5.00     4.65
4.65     YES                   NO
 L0000252         0   0.29240E-02  628808.5 4271364.3     5.0     5.00     4.65
4.65     YES                   NO
 L0000253         0   0.29240E-02  628799.0 4271361.5     5.0     5.00     4.65
4.65     YES                   NO
 L0000254         0   0.29240E-02  628791.3 4271356.5     5.0     5.00     4.65
4.65     YES                   NO
 L0000255         0   0.29240E-02  628787.7 4271347.2     4.9     5.00     4.65
4.65     YES                   NO
 L0000256         0   0.29240E-02  628784.1 4271337.9     4.8     5.00     4.65
4.65     YES                   NO
 L0000257         0   0.29240E-02  628780.5 4271328.5     4.8     5.00     4.65
4.65     YES                   NO
 L0000258         0   0.29240E-02  628776.8 4271319.2     4.8     5.00     4.65
4.65     YES                   NO
 L0000259         0   0.29240E-02  628773.2 4271309.9     4.8     5.00     4.65
4.65     YES                   NO
 L0000260         0   0.29240E-02  628769.6 4271300.6     4.8     5.00     4.65
4.65     YES                   NO
 L0000261         0   0.29240E-02  628766.0 4271291.2     4.9     5.00     4.65
4.65     YES                   NO
 L0000262         0   0.29240E-02  628762.4 4271281.9     4.9     5.00     4.65
4.65     YES                   NO
 L0000263         0   0.29240E-02  628771.8 4271278.8     4.9     5.00     4.65
4.65     YES                   NO
 L0000264         0   0.29240E-02  628781.3 4271275.8     4.9     5.00     4.65
4.65     YES                   NO
 L0000265         0   0.29240E-02  628790.8 4271272.7     5.0     5.00     4.65
4.65     YES                   NO
 L0000266         0   0.29240E-02  628800.3 4271269.7     5.0     5.00     4.65
4.65     YES                   NO
 L0000267         0   0.29240E-02  628809.9 4271266.6     5.0     5.00     4.65
4.65     YES                   NO
 L0000268         0   0.29240E-02  628816.7 4271269.1     5.0     5.00     4.65
4.65     YES                   NO
```

```
 L0000269         0   0.29240E-02  628820.3 4271278.5     5.0     5.00     4.65
4.65     YES                     NO
 L0000270         0   0.29240E-02  628823.9 4271287.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000271         0   0.29240E-02  628827.5 4271297.1     5.0     5.00     4.65
4.65     YES                     NO
 L0000272         0   0.29240E-02  628831.0 4271306.5     5.0     5.00     4.65
4.65     YES                     NO
 L0000273         0   0.29240E-02  628834.6 4271315.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000274         0   0.29240E-02  628838.2 4271325.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000275         0   0.29240E-02  628841.8 4271334.5     5.0     5.00     4.65
4.65     YES                     NO
 L0000276         0   0.29240E-02  628845.3 4271343.8     5.0     5.00     4.65
4.65     YES                     NO
 L0000277         0   0.29240E-02  628848.9 4271353.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000278         0   0.29240E-02  628852.5 4271362.5     5.1     5.00     4.65
4.65     YES                     NO
 L0000279         0   0.29240E-02  628844.7 4271362.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000280         0   0.29240E-02  628834.9 4271360.2     5.0     5.00     4.65
4.65     YES                     NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        15:52:44

                                  PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000281         0   0.29240E-02  628825.1 4271358.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000282         0   0.29240E-02  628815.3 4271356.2     5.0     5.00     4.65
4.65     YES                     NO
 L0000283         0   0.29240E-02  628805.5 4271354.2     5.0     5.00     4.65
4.65     YES                     NO
```

L0000284	0	0.29240E-02	628798.0	4271349.4	5.0	5.00	4.65	
4.65	YES	NO						
L0000285	0	0.29240E-02	628794.4	4271340.1	4.9	5.00	4.65	
4.65	YES	NO						
L0000286	0	0.29240E-02	628790.7	4271330.8	4.9	5.00	4.65	
4.65	YES	NO						
L0000287	0	0.29240E-02	628787.1	4271321.5	4.8	5.00	4.65	
4.65	YES	NO						
L0000288	0	0.29240E-02	628783.4	4271312.2	4.8	5.00	4.65	
4.65	YES	NO						
L0000289	0	0.29240E-02	628779.8	4271302.9	4.8	5.00	4.65	
4.65	YES	NO						
L0000290	0	0.29240E-02	628776.1	4271293.6	4.8	5.00	4.65	
4.65	YES	NO						
L0000291	0	0.29240E-02	628776.6	4271286.2	4.9	5.00	4.65	
4.65	YES	NO						
L0000292	0	0.29240E-02	628786.0	4271283.0	4.9	5.00	4.65	
4.65	YES	NO						
L0000293	0	0.29240E-02	628795.5	4271279.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000294	0	0.29240E-02	628805.0	4271276.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000295	0	0.29240E-02	628812.3	4271277.6	5.0	5.00	4.65	
4.65	YES	NO						
L0000296	0	0.29240E-02	628815.4	4271287.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000297	0	0.29240E-02	628818.5	4271296.6	5.0	5.00	4.65	
4.65	YES	NO						
L0000298	0	0.29240E-02	628821.6	4271306.1	5.0	5.00	4.65	
4.65	YES	NO						
L0000299	0	0.29240E-02	628824.7	4271315.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000300	0	0.29240E-02	628827.8	4271325.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000301	0	0.29240E-02	628830.9	4271334.7	5.0	5.00	4.65	
4.65	YES	NO						
L0000302	0	0.29240E-02	628834.0	4271344.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000303	0	0.29240E-02	628830.9	4271347.9	5.0	5.00	4.65	
4.65	YES	NO						
L0000304	0	0.29240E-02	628821.1	4271345.5	5.0	5.00	4.65	
4.65	YES	NO						
L0000305	0	0.29240E-02	628811.4	4271343.2	5.0	5.00	4.65	
4.65	YES	NO						
L0000306	0	0.29240E-02	628801.7	4271340.8	5.0	5.00	4.65	
4.65	YES	NO						
L0000307	0	0.29240E-02	628797.2	4271332.3	4.9	5.00	4.65	
4.65	YES	NO						
L0000308	0	0.29240E-02	628793.4	4271323.1	4.9	5.00	4.65	
4.65	YES	NO						

```
 L0000309         0   0.29240E-02  628789.6 4271313.8     4.8     5.00     4.65
4.65     YES                    NO
 L0000310         0   0.29240E-02  628785.8 4271304.6     4.8     5.00     4.65
4.65     YES                    NO
 L0000311         0   0.29240E-02  628782.0 4271295.3     4.8     5.00     4.65
4.65     YES                    NO
 L0000312         0   0.29240E-02  628784.9 4271289.1     4.9     5.00     4.65
4.65     YES                    NO
 L0000313         0   0.29240E-02  628794.4 4271286.0     4.9     5.00     4.65
4.65     YES                    NO
 L0000314         0   0.29240E-02  628803.9 4271282.8     5.0     5.00     4.65
4.65     YES                    NO
 L0000315         0   0.29240E-02  628809.6 4271287.2     5.0     5.00     4.65
4.65     YES                    NO
 L0000316         0   0.29240E-02  628812.9 4271296.6     5.0     5.00     4.65
4.65     YES                    NO
 L0000317         0   0.29240E-02  628816.1 4271306.1     5.0     5.00     4.65
4.65     YES                    NO
 L0000318         0   0.29240E-02  628819.3 4271315.6     5.0     5.00     4.65
4.65     YES                    NO
 L0000319         0   0.29240E-02  628822.6 4271325.0     5.0     5.00     4.65
4.65     YES                    NO
 L0000320         0   0.29240E-02  628818.7 4271330.9     5.0     5.00     4.65
4.65     YES                    NO
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                      ***        15:52:44

                                  PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                    *** VOLUME SOURCE DATA ***

               NUMBER EMISSION RATE                    BASE    RELEASE    INIT.
INIT.   URBAN  EMISSION RATE   AIRCRAFT
   SOURCE       PART.  (GRAMS/SEC)     X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.               (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)             BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000321         0   0.29240E-02  628809.1 4271333.8     5.0     5.00     4.65
4.65     YES                    NO
 L0000322         0   0.29240E-02  628801.5 4271332.7     5.0     5.00     4.65
4.65     YES                    NO
 L0000323         0   0.29240E-02  628798.0 4271323.4     4.9     5.00     4.65
4.65     YES                    NO
```

```
 L0000324         0   0.29240E-02  628794.4 4271314.0     4.8     5.00     4.65
4.65     YES                    NO
 L0000325         0   0.29240E-02  628790.8 4271304.7     4.8     5.00     4.65
4.65     YES                    NO
 L0000326         0   0.29240E-02  628787.3 4271295.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000327         0   0.29240E-02  628791.9 4271290.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000328         0   0.29240E-02  628801.6 4271288.2     4.9     5.00     4.65
4.65     YES                    NO
 L0000329         0   0.29240E-02  628806.6 4271294.3     5.0     5.00     4.65
4.65     YES                    NO
 L0000330         0   0.29240E-02  628810.0 4271303.7     5.0     5.00     4.65
4.65     YES                    NO
 L0000331         0   0.29240E-02  628813.4 4271313.2     4.9     5.00     4.65
4.65     YES                    NO
 L0000332         0   0.29240E-02  628816.8 4271322.6     5.0     5.00     4.65
4.65     YES                    NO
 L0000333         0   0.29240E-02  628811.1 4271327.5     5.0     5.00     4.65
4.65     YES                    NO
 L0000334         0   0.29240E-02  628803.4 4271326.7     4.9     5.00     4.65
4.65     YES                    NO
 L0000335         0   0.29240E-02  628799.9 4271317.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000336         0   0.29240E-02  628796.5 4271307.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000337         0   0.29240E-02  628793.0 4271298.5     4.9     5.00     4.65
4.65     YES                    NO
 L0000338         0   0.29240E-02  628798.8 4271293.9     4.9     5.00     4.65
4.65     YES                    NO
 L0000339         0   0.29240E-02  628804.3 4271299.3     4.9     5.00     4.65
4.65     YES                    NO
 L0000340         0   0.29240E-02  628807.7 4271308.7     4.9     5.00     4.65
4.65     YES                    NO
 L0000341         0   0.29240E-02  628811.1 4271318.1     4.9     5.00     4.65
4.65     YES                    NO
 L0000342         0   0.29240E-02  628808.9 4271324.4     4.9     5.00     4.65
4.65     YES                    NO
↟ *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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                                   PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                                *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                              SOURCE IDs
```

```
 -----------                                                  ----------


  ALL        L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    ,

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L0000014    , L0000015    , L0000016    ,

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L0000022    , L0000023    , L0000024    ,

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L0000030    , L0000031    , L0000032    ,

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L0000038    , L0000039    , L0000040    ,

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L0000126    , L0000127    , L0000128    ,
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*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs

L0000161 , L0000162 , L0000163 , L0000164 , L0000165 ,
L0000166 , L0000167 , L0000168 ,

L0000169 , L0000170 , L0000171 , L0000172 , L0000173 ,
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L0000190 , L0000191 , L0000192 ,

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L0000198 , L0000199 , L0000200 ,

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L0000217 , L0000218 , L0000219 , L0000220 , L0000221 ,
L0000222 , L0000223 , L0000224 ,

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L0000230    , L0000231    , L0000232    ,

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L0000310    , L0000311    , L0000312    ,

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L0000318    , L0000319    , L0000320    ,
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
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                                  PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID                                          SOURCE IDs
 -----------                                          ----------
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES
***

URBAN ID	URBAN POP	SOURCE IDs
	220544.	L0000001 , L0000002 , L0000003 , L0000004 , L0000005 , L0000006 , L0000007 , L0000008 ,
		L0000009 , L0000010 , L0000011 , L0000012 , L0000013 , L0000014 , L0000015 , L0000016 ,
		L0000017 , L0000018 , L0000019 , L0000020 , L0000021 , L0000022 , L0000023 , L0000024 ,
		L0000025 , L0000026 , L0000027 , L0000028 , L0000029 , L0000030 , L0000031 , L0000032 ,
		L0000033 , L0000034 , L0000035 , L0000036 , L0000037 , L0000038 , L0000039 , L0000040 ,
		L0000041 , L0000042 , L0000043 , L0000044 , L0000045 , L0000046 , L0000047 , L0000048 ,
		L0000049 , L0000050 , L0000051 , L0000052 , L0000053 , L0000054 , L0000055 , L0000056 ,
		L0000057 , L0000058 , L0000059 , L0000060 , L0000061 , L0000062 , L0000063 , L0000064 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** SOURCE IDs DEFINED AS URBAN SOURCES
***

URBAN ID	URBAN POP	SOURCE IDs

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            L0000161    , L0000162    , L0000163    , L0000164    , L0000165    ,
L0000166    , L0000167    , L0000168    ,

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L0000174    , L0000175    , L0000176    ,

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L0000190    , L0000191    , L0000192    ,

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L0000198    , L0000199    , L0000200    ,

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L0000278    , L0000279    , L0000280    ,

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L0000286    , L0000287    , L0000288    ,

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L0000294   , L0000295   , L0000296   ,

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L0000302   , L0000303   , L0000304   ,

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L0000310   , L0000311   , L0000312   ,

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L0000318   , L0000319   , L0000320   ,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                          *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

             L0000321   , L0000322   , L0000323   , L0000324   , L0000325   ,
L0000326   , L0000327   , L0000328   ,

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L0000334   , L0000335   , L0000336   ,

             L0000337   , L0000338   , L0000339   , L0000340   , L0000341   ,
L0000342   ,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                            *** DISCRETE CARTESIAN RECEPTORS ***
                                          (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                      (METERS)

     (628132.9, 4271400.6,   4.9,   4.9,   0.0);   (628196.5,
4271411.5,   5.1,   5.1,   0.0);
     (628171.1, 4271404.2,   5.0,   5.0,   0.0);   (628042.0,
4271391.5,   5.0,   5.0,   0.0);

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
L0000006	628723.4	4271305.1	-0.76
L0000007	628723.4	4271305.1	-6.99
L0000017	628688.7	4271205.6	-5.51
L0000018	628688.7	4271205.6	-3.99
L0000056	628914.9	4271307.8	-2.26
L0000057	628914.9	4271307.8	-2.41
L0000058	628904.7	4271326.9	-2.42
L0000059	628904.7	4271326.9	

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

```
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

                     METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 2017   1  1
 1
                                                          AND END DATE: 2017  12 31
24

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.



                                   *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
CATEGORIES ***
                                                           (METERS/SEC)

                                                  1.54,   3.09,   5.14,   8.23,
10.80,
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        15:52:44

                                   PAGE  20
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                     *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file:   KVCB_724828_93241\724828_2017-2021_AdjU.sfc
                Met Version:  21112
   Profile file:   KVCB_724828_93241\724828_2017-2021_AdjU.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:    93241                  Upper air station no.:    23230
                  Name: NUT_TREE_AIRPORT                            Name:
OAKLAND/WSO_AP
                  Year:   2017                                      Year:   2017

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN
ALBEDO  REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
 17 01 01   1 01  -25.0  0.249 -9.000 -9.000 -999.  298.     68.0  0.01   0.54
1.00    4.36  201.   10.0  280.9    2.0
```

```
 17 01 01   1 02  -36.6  0.365 -9.000 -9.000 -999.  530.    146.7  0.01   0.54
1.00    6.38  211.   10.0  281.4    2.0
 17 01 01   1 03  -31.6  0.315 -9.000 -9.000 -999.  425.    108.8  0.01   0.54
1.00    5.53  214.   10.0  280.9    2.0
 17 01 01   1 04  -17.5  0.172 -9.000 -9.000 -999.  184.     32.4  0.01   0.54
1.00    3.18  305.   10.0  276.4    2.0
 17 01 01   1 05   -8.6  0.120 -9.000 -9.000 -999.  101.     18.1  0.03   0.54
1.00    1.93    1.   10.0  274.9    2.0
 17 01 01   1 06  -10.8  0.135 -9.000 -9.000 -999.  119.     20.6  0.03   0.54
1.00    2.15   11.   10.0  275.9    2.0
 17 01 01   1 07  -12.0  0.140 -9.000 -9.000 -999.  126.     21.7  0.02   0.54
1.00    2.42  357.   10.0  276.4    2.0
 17 01 01   1 08   -9.7  0.125 -9.000 -9.000 -999.  107.     18.4  0.02   0.54
1.00    2.18  342.   10.0  277.0    2.0
 17 01 01   1 09    2.6  0.104  0.208  0.005  124.   81.    -39.5  0.03   0.54
0.41    1.38   29.   10.0  277.5    2.0
 17 01 01   1 10    4.4  0.119  0.349  0.005  350.   99.    -35.3  0.02   0.54
0.28    1.72  356.   10.0  279.2    2.0
 17 01 01   1 11   10.9  0.164  0.564  0.005  592.  159.    -36.3  0.03   0.54
0.23    2.15    1.   10.0  280.9    2.0
 17 01 01   1 12   14.5  0.165  0.676  0.017  768.  161.    -28.0  0.03   0.54
0.22    2.13   12.   10.0  281.4    2.0
 17 01 01   1 13   72.0  0.177  1.253  0.019  985.  179.     -6.9  0.03   0.54
0.22    2.08  143.   10.0  282.5    2.0
 17 01 01   1 14   65.1  0.167  1.252  0.020 1084.  163.     -6.4  0.01   0.54
0.23    2.21  191.   10.0  284.9    2.0
 17 01 01   1 15   39.8  0.254  1.063  0.019 1086.  306.    -36.8  0.01   0.54
0.26    3.86  199.   10.0  284.2    2.0
 17 01 01   1 16    9.4  0.267  0.658  0.019 1087.  331.   -181.8  0.01   0.54
0.34    4.32  200.   10.0  284.9    2.0
 17 01 01   1 17  -25.4  0.289 -9.000 -9.000 -999.  373.     92.1  0.01   0.54
0.59    5.09  248.   10.0  283.1    2.0
 17 01 01   1 18  -23.3  0.233 -9.000 -9.000 -999.  272.     59.9  0.01   0.54
1.00    4.15  234.   10.0  282.0    2.0
 17 01 01   1 19  -21.2  0.212 -9.000 -9.000 -999.  234.     49.3  0.01   0.54
1.00    3.78  228.   10.0  281.4    2.0
 17 01 01   1 20  -24.8  0.247 -9.000 -9.000 -999.  295.     67.1  0.01   0.54
1.00    4.44  275.   10.0  281.4    2.0
 17 01 01   1 21  -25.7  0.256 -9.000 -9.000 -999.  310.     71.8  0.01   0.54
1.00    4.53  244.   10.0  280.9    2.0
 17 01 01   1 22  -25.4  0.253 -9.000 -9.000 -999.  305.     70.2  0.01   0.54
1.00    4.48  244.   10.0  280.9    2.0
 17 01 01   1 23  -25.2  0.250 -9.000 -9.000 -999.  300.     68.9  0.01   0.54
1.00    4.44  218.   10.0  280.4    2.0
 17 01 01   1 24  -20.2  0.200 -9.000 -9.000 -999.  215.     43.9  0.01   0.54
1.00    3.58  221.   10.0  279.2    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                               *** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
, L0000027   , L0000028   , . . .   ,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                          ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 - - -

*** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): L0000001 , L0000002 , L0000003 , L0000004 , L0000005 ,
L0000006 , L0000007 , L0000008 , L0000009 , L0000010 , L0000011 , L0000012 , L0000013 ,
L0000014 , L0000015 , L0000016 , L0000017 , L0000018 , L0000019 , L0000020 , L0000021 ,
L0000022 , L0000023 , L0000024 , L0000025 , L0000026 , L0000027 , L0000028 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
628132.88	4271400.57	49.66938	(17013018)	628196.51	4271411.48	57.63457	(17121117)
628171.06	4271404.21	53.77041	(17121117)	628041.98	4271391.48	44.60677	(17013018)
627992.90	4271402.39	41.04786	(17013018)	627951.99	4271399.66	39.14086	(17013018)
627949.27	4271415.12	37.96423	(17013018)	628688.67	4271205.63	324.74121	(17022505)
628722.74	4271198.81	342.88738	(17012501)	628756.82	4271199.49	316.56922	(17121806)
628732.97	4271264.92	409.56452	(17021408)	628723.42	4271305.13	379.66243	(17010509)
628789.53	4271236.98	348.55231	(17012908)	628871.32	4271357.61	441.92549	(17122709)
628842.01	4271273.78	392.34799	(17120618)	628879.49	4271257.42	312.04404	(17011402)
628904.71	4271326.94	340.93294	(17022608)	628914.93	4271307.85	310.84884	(17122509)

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM_10 IN MICROGRAMS/M**3 **

GROUP ID	NETWORK AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	124.07367 AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
	2ND HIGHEST VALUE IS	108.44637 AT (628842.01, 4271273.78, 5.11, 5.11, 0.00)	DC	
	3RD HIGHEST VALUE IS	95.79049 AT (628789.53, 4271236.98, 4.90, 4.90, 0.00)	DC	
	4TH HIGHEST VALUE IS	90.07197 AT (628904.71, 4271326.94, 5.23, 5.23, 0.00)	DC	
	5TH HIGHEST VALUE IS	84.10640 AT (628732.97, 4271264.92, 4.92, 4.92, 0.00)	DC	
	6TH HIGHEST VALUE IS	76.39528 AT (628879.49, 4271257.42, 5.16, 5.16, 0.00)	DC	
	7TH HIGHEST VALUE IS	73.49348 AT (628722.74, 4271198.81, 4.71, 4.71, 0.00)	DC	
	8TH HIGHEST VALUE IS	72.74405 AT (628756.82, 4271199.49, 4.68, 4.68, 0.00)	DC	
	9TH HIGHEST VALUE IS	72.58204 AT (628914.93, 4271307.85, 5.13, 5.13, 0.00)	DC	
	10TH HIGHEST VALUE IS	67.15663 AT (628723.42, 4271305.13, 4.91, 4.91, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID
ALL	1ST HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 2ND HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 3RD HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 4TH HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 5TH HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 6TH HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 7TH HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	
ALL	HIGH 8TH HIGH VALUE IS	441.92549	ON 17122709: AT (628871.32, 4271357.61, 5.22, 5.22, 0.00)	DC	

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   2 Warning Message(s)
 A Total of   251 Informational Message(s)

 A Total of   8760 Hours Were Processed

 A Total of   58 Calm Hours Identified

 A Total of   193 Missing Hours Identified (2.20 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

```
   ********   WARNING MESSAGES   ********
ME W186     799       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187     799       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


   ***********************************
   *** AERMOD Finishes Successfully ***
   ***********************************
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                          ***   MODEL SETUP OPTIONS SUMMARY
 ***
 - - -

```
 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  21112

 **Output Options Selected:
         Model Outputs Tables of PERIOD Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and
Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =    33.20 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **File for Summary of Results:   CDR_Construction_Onsite.sum

 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        15:52:44

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
PROCESSING ***
                                                              (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
```

1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1   1 1 1 1 1

                    METEOROLOGICAL DATA PROCESSED BETWEEN START DATE: 2017   1 1
 1
                                                          AND END DATE: 2017 12 31
24

                NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON
WHAT IS INCLUDED IN THE DATA FILE.

                                    *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED
CATEGORIES ***
                                                           (METERS/SEC)

                                                  1.54,   3.09,   5.14,   8.23,
10.80,

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                      *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL
DATA ***

   Surface file: KVCB_724828_93241\724828_2017-2021_AdjU.sfc
                Met Version: 21112
   Profile file: KVCB_724828_93241\724828_2017-2021_AdjU.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   93241   Upper air station no.:   23230
                 Name: NUT_TREE_AIRPORT   Name:

OAKLAND/WSO_AP

Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-25.0	0.249	-9.000	-9.000	-999.	298.	68.0	0.01	0.54	1.00	4.36	201.	10.0	280.9	2.0
17	01	01	1	02	-36.6	0.365	-9.000	-9.000	-999.	530.	146.7	0.01	0.54	1.00	6.38	211.	10.0	281.4	2.0
17	01	01	1	03	-31.6	0.315	-9.000	-9.000	-999.	425.	108.8	0.01	0.54	1.00	5.53	214.	10.0	280.9	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	184.	32.4	0.01	0.54	1.00	3.18	305.	10.0	276.4	2.0
17	01	01	1	05	-8.6	0.120	-9.000	-9.000	-999.	101.	18.1	0.03	0.54	1.00	1.93	1.	10.0	274.9	2.0
17	01	01	1	06	-10.8	0.135	-9.000	-9.000	-999.	119.	20.6	0.03	0.54	1.00	2.15	11.	10.0	275.9	2.0
17	01	01	1	07	-12.0	0.140	-9.000	-9.000	-999.	126.	21.7	0.02	0.54	1.00	2.42	357.	10.0	276.4	2.0
17	01	01	1	08	-9.7	0.125	-9.000	-9.000	-999.	107.	18.4	0.02	0.54	1.00	2.18	342.	10.0	277.0	2.0
17	01	01	1	09	2.6	0.104	0.208	0.005	124.	81.	-39.5	0.03	0.54	0.41	1.38	29.	10.0	277.5	2.0
17	01	01	1	10	4.4	0.119	0.349	0.005	350.	99.	-35.3	0.02	0.54	0.28	1.72	356.	10.0	279.2	2.0
17	01	01	1	11	10.9	0.164	0.564	0.005	592.	159.	-36.3	0.03	0.54	0.23	2.15	1.	10.0	280.9	2.0
17	01	01	1	12	14.5	0.165	0.676	0.017	768.	161.	-28.0	0.03	0.54	0.22	2.13	12.	10.0	281.4	2.0
17	01	01	1	13	72.0	0.177	1.253	0.019	985.	179.	-6.9	0.03	0.54	0.22	2.08	143.	10.0	282.5	2.0
17	01	01	1	14	65.1	0.167	1.252	0.020	1084.	163.	-6.4	0.01	0.54	0.23	2.21	191.	10.0	284.9	2.0
17	01	01	1	15	39.8	0.254	1.063	0.019	1086.	306.	-36.8	0.01	0.54	0.26	3.86	199.	10.0	284.2	2.0
17	01	01	1	16	9.4	0.267	0.658	0.019	1087.	331.	-181.8	0.01	0.54	0.34	4.32	200.	10.0	284.9	2.0
17	01	01	1	17	-25.4	0.289	-9.000	-9.000	-999.	373.	92.1	0.01	0.54	0.59	5.09	248.	10.0	283.1	2.0
17	01	01	1	18	-23.3	0.233	-9.000	-9.000	-999.	272.	59.9	0.01	0.54	1.00	4.15	234.	10.0	282.0	2.0
17	01	01	1	19	-21.2	0.212	-9.000	-9.000	-999.	234.	49.3	0.01	0.54	1.00	3.78	228.	10.0	281.4	2.0
17	01	01	1	20	-24.8	0.247	-9.000	-9.000	-999.	295.	67.1	0.01	0.54	1.00	4.44	275.	10.0	281.4	2.0
17	01	01	1	21	-25.7	0.256	-9.000	-9.000	-999.	310.	71.8	0.01	0.54	1.00	4.53	244.	10.0	280.9	2.0

```
 17 01 01   1 22  -25.4  0.253 -9.000 -9.000 -999.  305.     70.2  0.01   0.54
1.00    4.48  244.   10.0  280.9    2.0
 17 01 01   1 23  -25.2  0.250 -9.000 -9.000 -999.  300.     68.9  0.01   0.54
1.00    4.44  218.   10.0  280.4    2.0
 17 01 01   1 24  -20.2  0.200 -9.000 -9.000 -999.  215.     43.9  0.01   0.54
1.00    3.58  221.   10.0  279.2    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 17 01 01 01   10.0 1  201.    4.36   281.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
 *** AERMOD - VERSION 23132  ***   *** C:\Users\enuno\OneDrive -
Dudek\Desktop\HARP2\HARP\CDR_Construction\ ***        05/28/24
 *** AERMET - VERSION  21112 ***   ***
                       ***        15:52:44

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                                       *** THE SUMMARY OF MAXIMUM PERIOD (  8760
HRS) RESULTS ***


                                    ** CONC OF PM_10    IN MICROGRAMS/M**3
             **


                        NETWORK
GROUP ID                       AVERAGE CONC                RECEPTOR  (XR, YR, ZELEV,
ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS     124.07367 AT (  628871.32,  4271357.61,     5.22,
    5.22,    0.00)  DC
          2ND HIGHEST VALUE IS     108.44637 AT (  628842.01,  4271273.78,     5.11,
    5.11,    0.00)  DC
          3RD HIGHEST VALUE IS      95.79049 AT (  628789.53,  4271236.98,     4.90,
    4.90,    0.00)  DC
          4TH HIGHEST VALUE IS      90.07197 AT (  628904.71,  4271326.94,     5.23,
    5.23,    0.00)  DC
          5TH HIGHEST VALUE IS      84.10640 AT (  628732.97,  4271264.92,     4.92,
    4.92,    0.00)  DC
          6TH HIGHEST VALUE IS      76.39528 AT (  628879.49,  4271257.42,     5.16,
    5.16,    0.00)  DC
          7TH HIGHEST VALUE IS      73.49348 AT (  628722.74,  4271198.81,     4.71,
    4.71,    0.00)  DC
          8TH HIGHEST VALUE IS      72.74405 AT (  628756.82,  4271199.49,     4.68,
```

4.68,   0.00) DC
      9TH HIGHEST VALUE IS   72.58204 AT (628914.93, 4271307.85,   5.13,
5.13,   0.00) DC
     10TH HIGHEST VALUE IS   67.15663 AT (628723.42, 4271305.13,   4.91,
4.91,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                                *** THE SUMMARY OF HIGHEST 1-HR
RESULTS ***

                                    ** CONC OF PM_10   IN MICROGRAMS/M**3
             **

                                                        DATE
                                       NETWORK
GROUP ID   AVERAGE CONC   (YYMMDDHH)   RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)   OF TYPE GRID-ID
- -
- -

ALL   HIGH   1ST HIGH VALUE IS   441.92549 ON 17122709: AT (628871.32,
4271357.61,   5.22,   5.22,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of   0 Fatal Error Message(s)
A Total of   2 Warning Message(s)
A Total of   251 Informational Message(s)

A Total of   8760 Hours Were Processed

A Total of   58 Calm Hours Identified

A Total of   193 Missing Hours Identified (2.20 Percent)

   ******** FATAL ERROR MESSAGES ********
              *** NONE ***

   ********   WARNING MESSAGES   ********
ME W186   799   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
    0.50
ME W187   799   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

HARP2 - HRACalc (dated 22118) 5/28/2024 4:06:01 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 2.74

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 2.74
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Unmit_Cancer_OnsiteNCAcuteRiskSumByRec.csv
HRA ran successfully

HARP2 - HRACalc (dated 22118) 5/28/2024 4:07:22 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 18
Total Exposure Duration: 2.74

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 2.74
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteCancerRisk.csv
Cancer risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteNCChronicRisk.csv
Chronic risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteNCAcuteRisk.csv
Acute risk total by receptor saved to: C:\Users\enuno\OneDrive - Dudek\Desktop\HARP2\HARP\CDR_CON_HRA_ONSITE_HARP2\hra\Mit_Cancer_OnsiteNCAcuteRiskSumByRec.csv
HRA ran successfully

Regulatory Setting

Air Quality

Regulatory Framework

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by federal and state agencies based on a review of available scientific evidence. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O_3, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act (CCAA) of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O_3, CO, SO_2 (1-hour and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

Local

Air quality districts have local responsibility in overseeing stationary-source emissions, approving permits, maintaining emissions inventories, maintaining air quality monitoring stations, overseeing agricultural burning permits, and reviewing ai quality-related sections of environmental documents required by CEQA. Air quality districts are also responsible for establishing and enforcing local air quality regulations that address the federal and state air quality laws for ensuring NAAQS and CAAQS are met and maintained.

The project site is within the jurisdiction of the Yolo-Solano Air Quality Management District (YSAQMD). Under the CCAA, YSAQMD is required to develop an air quality plan for nonattainment criteria pollutants in the air district.

The YSAQMD federal and state air quality plans include the 2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Further Reasonable Progress Plan (2017 Ozone Plan), the 2019 Triennial Assessment and Plan Update, and the 2023 Sacramento Regional 2015 National Ambient Air Quality Standard (NAAQS) 8-Hour Ozone Attainment & Reasonable Further Progress Plan (2023 Ozone Plan).

The 2023 Ozone Plan was developed in response to the United States Environmental Protection Agency (EPA) revising the 2008 8-Hour ozone (O_3) standard from 75 part per billion (ppb) to the 2015 8-Hour 03 standard of 70 ppb. As such, the 2023 Ozone Plan supersedes the 2017 Ozone Plan. The 2023 Ozone Plan was approved by the YSAQMD, other air districts within the Sacramento Federal Nonattainment Area (SFNA), and the California Air Resources Board (CARB) in the Fall of 2023. CARB submitted the 2015 8-Hour Ozone Plan to the United States Environmental Protection Agency (EPA) in November 2023; however, the EPA has not acted to approve the plan as of the date of this writing. Nevertheless, the strategies and measures included in the 2023 Ozone Plan have been demonstrated to help the SFNA achieve the 2015 NAAQS O_3 standard by 2032. The 2023 Plan builds upon efforts contained in the 2017 Ozone Plan. The 2023 Ozone Plan was developed for the Sacramento region by the five air districts within the SFNA, which includes YSAQMD, El Dorado County Air Quality Management District, the Feather River Air Quality Management District, Placer County Air Pollution Control District, Sacramento Metropolitan Air Quality Management District, in collaboration with CARB, Sacramento Area Council of Governments (SACOG), and the Bay Area Metropolitan Transportation Commission (MTC).

YSAQMD has adopted CEQA emission thresholds in its Handbook for Assessing and Mitigating Air Quality Impacts (2007) to assist lead agencies in determining the level of significance of project-related emissions. According to the YSAQMD handbook, project emissions that exceed the recommended threshold levels shown in Table 3.3-1 are considered potentially significant and should be mitigated where feasible. Also, according to the handbook, the potential air quality effects of local projects should be evaluated based on the project's consistency with the most recently adopted air quality attainment plan (AQAP) or State Implementation Plan (SIP). To evaluate local project's consistency with the regional air quality plans, the lead agency should consider the local project's consistency with the AQAP and SIP population and vehicle use projections, the extent to which the plan implements AQAP and SIP transportation control measures, and whether the project provides buffer zones around sources of odors and toxics.

Table 3.3-1. YSAQMD Air Quality – Thresholds of Significance

Pollutant	Construction Thresholds		Operational Thresholds	
	Maximum Daily Emissions (lbs/day)	Annual Emissions (tons/year)	Maximum Daily Emissions (lbs/day)	Annual Emissions (tons/year)
ROG	None	10	None	10
NO_x	None	10	None	10
PM_{10}	80	None	80	None
$PM_{2.5}$[1]	82	None	82	None
Local CO	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)			
Risks and Hazards	Increased cancer risk for the Maximallly Exposed Individual (MEI) of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute)			

Source: YSAQMD 2007.

Notes: lbs/day = pounds per day; tons/year = tons per year; ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; ROG = reactive organic gases; NO_x = oxides of nitrogen; PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; $PM_{2.5}$ = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

[1] YSAQMD has adopted annual thresholds for ROG and NO_x, as well as a daily threshold for PM_{10}. Because no significance thresholds exist for daily emissions of ROG and NO_x and annual emissions of PM_{10} and $PM_{2.5}$, 'NA' has been inserted under these pollutants. The SMAQMD threshold for daily $PM_{2.5}$ emissions was also applied to this analysis.

Environmental Setting

The project is located within the boundaries of the Sacramento Valley Air Basin (SVAB). The SVAB encompasses eleven counties including all of Shasta, Tehama, Glenn, Colusa, Butte, Sutter, Yuba, Sacramento, and Yolo Counties, the westernmost portion of Placer County and the northeastern half of Solano County. The SVAB is bounded by the North Coast Ranges on the west and Northern Sierra Nevada Mountains on the east. The intervening terrain is relatively flat.

Hot dry summers and mild rainy winters characterize the Mediterranean climate of the SVAB. During the year the temperature may range from 20 to 115 degrees Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches, and the rainy season generally occurs from November through March. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

The mountains surrounding the SVAB create a barrier to airflow, which can trap air pollutants under certain meteorological conditions. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells collect over the Sacramento Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with temperature inversions that trap pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant morning air or light winds with the delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the Sacramento Valley. During about half of the days from July to September, however, a phenomenon called the "Schultz Eddy" prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out, the Schultz Eddy causes the wind pattern to circle back to the south. Essentially, this phenomenon causes the air pollutants to be blown south toward the SVAB.

This phenomenon has the effect of exacerbating the pollution levels in the area and increases the likelihood of violating federal or state standards. The eddy normally dissipates around noon when the delta sea breeze arrives.

Air pollutants of concern in the City include O_3 (NO_x and ROG), CO, and $PM_{2.5/10}$ (City of West Sacramento 2016, p. 3.3-6).

Sensitive receptors refer to those segments of the population most susceptible to poor air quality and typically include children, elderly people and sick people, as well as sensitive land uses such as schools, hospitals, parks, and residential communities (City of West Sacramento, 2016, p 3.3-9). The nearest sensitive receptors are the onsite resident nuns, the nearest offsite sensitive receptors are the residences located across Highway 275, over 500 feet to the south of the project site.

Energy

Regulatory Framework

Federal

Federal Energy Policy and Conservation Act and CAFE Standards

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards, known as the Corporate Average Fuel Economy (CAFE) standards, for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new Corporate Average Fuel Economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the Act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the NHTSA is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks

were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (RFS) to replace petroleum. The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as RFS2 and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.
- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green" jobs.

State

California Energy Commission

The CEC's Integrated Energy Policy Report set forth policies that would enable the state to meet its energy needs under the carbon constraints established in the 2006 Global Warming Solutions Act. The Integrated Energy Policy Report also provides a set of recommended actions to achieve these policies.

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

State of California Energy Action Plan

The CEC and CPUC approved the first State of California Energy Action Plan in 2003. The plan established shared goals and specific actions to ensure that adequate, reliable, and reasonably priced electrical power and natural gas supplies are provided and identified policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers. In 2005, CEC and CPUC adopted a second Energy Action Plan to reflect various policy changes and actions of the prior 2 years.

At the beginning of 2008, the CEC and CPUC determined that it was not necessary or productive to prepare a new energy action plan. This determination was based in part on a finding that the state's energy policies have been significantly influenced by the passage of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (discussed below). Rather than produce a new energy action plan, the CEC and CPUC prepared an "update" that examines the state's ongoing actions in the context of global climate change.

Senate Bills 1078 (2002), 107 (2006), X1-2 (2011), 350 (2015), 100 (2018), 1020 (2022)

Senate Bill (SB) 1078 established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1- 2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) expanded the RPS because it requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of the retail sales of electricity to California. This bill requires that the achievement of 100% zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS requirements. Therefore, any project's reliance on non-renewable energy sources would also be reduced.

Assembly Bill 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California Building Standards

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards (California Code of Regulations, Title 24). Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. The 2022 standards improved upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code (CALGreen) in December 2021. The 2022 Energy Code went into effect on January 1, 2023.

State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO_2) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013– 2016 standards resulted in a reduction of approximately 30% compared to the 2002 fleet.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars (ACC). By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2023).

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1)(84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

Advanced Clean Cars Program

The ACC I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021a). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021a). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package was adopted by CARB on August 25, 2022.

Advanced Clean Trucks Program

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO_x, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021b). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.
2. Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Greenhouse Gas Emissions

Regulatory Framework

Also refer to the Energy section for relevant regulations that are also applicable to Energy.

Federal

Massachusetts v. EPA

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs— carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride —in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The Administrator further found the combined emissions of GHGs—CO2, CH4, N2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

State

The state has taken a number of actions to address climate change. These include executive orders (EOs), legislation, and CARB plans and requirements. A few key regulations are summarized below.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the

transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS; 17 Cal. Code Regs., Section 95480 et seq.)
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012 (CARB 2014). The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including: energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent global warming potentials identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO_2e to 431 MMT CO_2e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. The Governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the Legislature affirmed the importance of addressing climate change through passage of Senate Bill 32 (SB 32) (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted *California's 2017 Climate Change Scoping Plan (*2017 Scoping Plan*)* for public review and comment (CARB 2017). The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies

that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the state's climate change priorities to 2030 and beyond. The strategies' known commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

CARB adopted the 2022 Scoping Plan Update in December 2022. The 2022 CARB Scoping Plan Update outlines the state's plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward achieving GHG reduction goals by 2030. Per the Legislative Analyst's Office, the 2022 CARB Scoping Plan identifies a more aggressive 2030 GHG goal. As it relates to the 2030 goal, perhaps the most significant change in the 2022 plan (as compared to previous Scoping Plans) is that it identifies a new GHG target of 48% below the 1990 level, compared to the current statutory goal of 40% below. Current law requires the state to reduce GHG emissions by at least 40% below the 1990 level by 2030 but does not specify an alternative goal. According to CARB, a focus on the lower target is needed to put the state on a path to meeting the newly established 2045 goal, consistent with the overall path to 2045 carbon neutrality. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen (CARB 2022).

The 2022 CARB Scoping Plan Update also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage from anthropogenic point sources, where CO_2 is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and CO_2 removal from ambient air, through mechanical (e.g., direct air capture with sequestration) or nature-based (e.g., management of natural and working lands) applications.

The 2022 CARB Scoping Plan Update details "Local Actions" in Appendix D. The Appendix D Local Actions include recommendations to build momentum for local government actions that align with the state's climate goals, with a focus on local GHG reduction strategies (commonly referred to as climate action planning) and approval of new land use development projects, including through environmental review under CEQA. The recommendations provided in 2022 CARB Scoping Plan Appendix D are non-binding (i.e., not regulatory) and should not be interpreted as a directive to local governments, but rather as evidence-based analytical tools to assist local governments with their role as essential partners in achieving California's climate goals.

2022 CARB Scoping Plan Appendix D recognizes consistency with a CEQA-qualified GHG reduction plan such as a climate action plan (CAP) as a first option for evaluating potential GHG emission impacts under CEQA. Absent a qualified GHG reduction plan, for residential and mixed-use projects, 2022 CARB Scoping Plan Appendix D provides a second option for evaluating project consistency with recommendations for key attributes that projects should achieve that would align with the state's climate goals. These key attributes include EV charging infrastructure, infill location, no loss or conversion of natural and working lands, transit-supportive densities or proximity to transit stops,

reducing parking requirements, provision of affordable housing (at least 20% of units), no net loss of existing affordable units, and all-electric appliances with no natural gas connection (CARB 2022i). Projects that achieve all key attributes are considered "clearly consistent" with the state's climate and housing goals, since these attributes address the largest sources of operational emissions for residential and mixed-use projects. According to the 2022 CARB Scoping Plan Update, in general, residential and mixed-use projects that incorporate all these attributes are aligned with the state's priority GHG reduction strategies for local climate action as shown on Table 1 of the 2022 CARB Scoping Plan Update, and with the state's climate and housing goals. Such projects are considered consistent with the Scoping Plan; and therefore, the GHG emissions associated with such projects generally result in a less-than-significant GHG impact under CEQA (CARB 2022). Additionally, the 2022 CARB Scoping Plan Update states that lead agencies under CEQA "may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State's climate goals" (CARB 2022).

The above is CARB's recommended approach for evaluating significance of GHG impacts for residential and mixed-use development projects (CARB 2022). However, alternative approaches to evaluating project-level alignment with state climate goals are also provided in the 2022 CARB Scoping Plan Appendix D. Lead agencies under CEQA can make a significance determination based on whether the project would result in net-zero GHG emissions and whether the project is consistent with a significance determination/threshold recommended by the applicable air district or other lead agencies (CARB 2022). The 2022 CARB Scoping Plan Appendix D acknowledges, however, that net zero may not be feasible or appropriate for every project (CARB 2022).

Local

Yolo-Solano Air Quality Management District

The Yolo-Solano Air Quality Management District (YSAQMD) and a committee of air districts in the Sacramento Region[1], have developed draft thresholds for evaluating GHG emissions from new stationary sources and land development projects. The goal of the thresholds is to capture at least 90% of GHG emissions from new stationary sources and land development projects. The Sacramento Metropolitan Air Quality Management District (SMAQMD) adopted the mass emissions thresholds in October 2014. Placer County Air Pollution Control District adopted its thresholds in 2016. YSAQMD has not adopted any thresholds of significance.

City of West Sacramento Climate Action Plan

The City of West Sacramento is currently preparing a Climate Action Plan (CAP) as an update to its original CAP that was prepared in 2009, but never adopted. The CAP will demonstrate the City's commitment to reducing GHG emissions in a manner that is consistent with California's near-term GHG reduction goal of 40% reductions below 1990 levels. It will also outline a high-level pathway to achieve carbon zero by 2045, consistent with the Mayors' Commissions on Climate Change, which is a regional effort that is co-led by the Cities of West Sacramento and Sacramento.

The CAP will analyze GHG emissions that result from community activities, including natural gas and electricity use in homes and businesses, transportation from residents and employees, and solid waste disposal and treatment, among other sources. It will also include a projection of how the community's emissions could change in the future if no further action is taken to slow or reduce their growth. The comparison of future emissions estimates to the

[1] Air districts in the region include YSAQMD, Sacramento Metropolitan Air Quality Management District, El Dorado County Air Quality Management District, Feather River Air Quality Management District, and Placer County Air Pollution Control District.

City's GHG targets is intended to frame a discussion about the types of local actions that will be necessary for target achievement.

Through the CAP development process, the City intends to evaluate a range of GHG reduction strategies that will be informed from research conducted by the Mayors' Commissions on Climate Change and by residents and businesses to understand the city's unique opportunities and challenges.

2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)

The Sacramento Area Council of Governments (SACOG), designated by the Federal government as the Metropolitan Planning Organization (MPO), oversees the regional transportation plan for the Sacramento region, updated every four years in collaboration with local governments. As designated by the state of California Placer and El Dorado counties serve as Regional Transportation Planning Agencies (RTPAs), responsible for their state-level transportation plans. SACOG, functioning as the RTPA for Sacramento, Sutter, Yolo, and Yuba counties, collaborates with Placer County Transportation Planning Agency and El Dorado County Transportation Commission to maintain consistency across county plans and the broader regional framework.

The 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) prepared by the SACOG outlines a comprehensive regional approach to transportation and land use planning through 2040. The plan aims to accommodate projected growth while addressing environmental, economic, and social challenges. Key strategies for reducing greenhouse gas (GHG) emissions include promoting higher-density development near transit corridors to reduce vehicle miles traveled, enhancing public transit services, expanding bicycle and pedestrian infrastructure, and implementing smart growth principles. Additionally, the plan emphasizes the integration of new technologies such as electric vehicles and intelligent transportation systems to improve efficiency and reduce emissions. By aligning transportation investments with sustainable land use patterns, SACOG aims to create more livable communities and achieve significant GHG reductions.

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Attachment C

Energy Calculations

Construction

Source	Percent	Total MTCO2	Gallons Diesel	Gallons Gasoline
2025				
Off-road	79.3%	518	50,730	
Electricity	0.0%	0		
Worker	7.0%	46		5,207
Vendor	4.2%	27	2,687	
Hauling	9.5%	62	6,077	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*653*	*59,494*	*5,207*
2026				
Off-road	69.5%	283	27,753	
Electricity	0.0%	0		
Worker	14.7%	60		6,826
Vendor	15.8%	64	6,309	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*408*	*34,062*	*6,826*
2027				
Off-road	70.0%	284	27,795	
Electricity	0.0%	0		
Worker	14.5%	59		6,695
Vendor	15.5%	63	6,155	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*405*	*33,949*	*6,695*
2028				
Off-road	70.0%	14	1,355	
Electricity	0.0%	0		
Worker	14.5%	3		326
Vendor	15.5%	3	300	
Hauling	0.0%	0	0	
Onsite Truck	0.0%	0	0	
Total	*100.0%*	*20*	*1,655*	*326*
Total Construction Period				
Off-road	74.0%	1,099	107,632	0
Electricity	0.0%	0	0	0
Worker	11.3%	167	0	19,055
Vendor	10.6%	158	15,451	0
Hauling	4.2%	62	6,077	0
Onsite Truck	0.0%	0	0	0
Total	***100.0%***	***1,486***	***129,161***	***19,055***

148,216

Operation

Source	Percent	Total MTCO2	Gallons Diesel	Gallons Gasoline
Mobile Exhaust Gasoline	13.4%	65.00	0	7,403
Mobile Exhaust Diesel	9.3%	45.17	4,424	
Landscape Equipment	0.6%	2.94		
Electricity	21.0%	102.00		
Natural Gas Energy	45.2%	219.00		
Water and Wastewater	0.4%	1.92		
Solid Waste	10.1%	48.97		
Total	**100.0%**	**484.81**	**4,424**	**7,403**

Type	Total	Units
Petroleum	11,827	gallons/year
Electricity - unmitigated	1,087,233	kWh/year
Natural Gas	4,121,566	kBTU/year
Diesel % of County	0.016	
Gaoline % of County	0.008	

Constants		
Fuel	**KgCO2/Gallon**	1000 Kg in MT
Gasoline	8.78	
Diesel	10.21	

Source: The Climate Registry 2021

Table 2.1 U.S. Default Factors for Calculating CO_2 Emissions from Combustion of Transport Fuels

Fuel Type	Carbon Content (Per Unit Energy)	Heat Content	Fraction Oxidized	CO_2 Emission Factor (Per Unit Volume)
Fuels Measured in Gallons	**kg C / MMBtu**	**MMBtu / barrel**		**kg CO_2 / gallon**
Gasoline	19.2	5.25	1	8.78
Diesel Fuel	20.2	5.80	1	10.21