Memo

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Sacramento, CA 95814
916.444.7301

Date: August 29, 2024

To: Sean Whelan

From: Dimitri Antoniou (Ascent)

Subject: Air Quality Assessment for the 10002-10090 Jibboom Street Project

1 INTRODUCTION AND PROJECT DESCRIPTION

The applicant proposes to construct four mixed-used buildings containing ground-floor commercial uses and residential uses on the upper floors on a 1.67-acre parcel located at 10002-10090 Jibboom Street in The Town of Truckee (Town). The project is seeking an exemption from the California Environmental Quality Act (CEQA); however, approval of development projects is still required to comply with adopted Town of Truckee General Plan policies (i.e., COS-8.7 and COS 8.10) that protect air quality and sensitive receptors. This memorandum provides a summary of the applicable policies, a quantitative health risk assessment (HRA), a construction emissions assessment, methods used to conduct the analysis, and an assessment of the project's compliance with applicable policies. All emissions modeling is included in Attachment A.

The project proposes to construct four buildings (Building A, B, C, and D), comprising a total of 85,973 square feet (sf) of residential and 3,339 sf of commercial uses. In addition, 69 parking spaces would be provided. Construction activities are anticipated to occur in three distinct phases, beginning with the initial grading and utility installation for the entire site and construction of Building A. Subsequently, finish grading for the remaining buildings would occur, then building construction, then architectural coatings, sequentially. Construction is anticipated to begin in May of 2025 and be complete by mid-October 2030.

2 REGULATORY CONTEXT

Air Quality is regulated by federal, state, and local agencies. In California, air districts have been established to implement requirements of the Clean Air Act (CAA) and the California Clean Air Act (CCAA). The Northern Sierra Air Quality Management District (NSAQMD) is the lead air quality regulatory agency for Nevada County, including The Town. In addition, the Town of Truckee 2040 General Plan contains policies that pertain to individual development projects. The following summarizes the specific requirements that must be met for the project.

NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT

The NSAQMD Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects (Guidelines) is an advisory document that provides lead agencies, consultants, and project applicants with a framework and methodology for preparing air quality evaluations in environmental documents. Adopted in 2009, the guidelines apply to land use projects within the Town. NSAQMD recommends a three-tiered approach to evaluating whether a project is required to evaluate air quality impacts in an environmental impact report. Each level, established for reactive organic gases (ROG), oxides of nitrogen (NOx), and respirable particulate matter (PM_{10}), are summarized below.

Table 1 Northern Sierra Air Quality Management District Thresholds of Significance

Threshold Level	ROG	NO_x	PM_{10}
Level A	0-24	0-24	0-79
Level B	24-136	24-136	79-136
Level C	>136	>136	>136

Notes: ROG=reactive organic gases; NOx= oxides of nitrogen; PM10= respirable particulate matter.

Source: NSAQMD 2009.

The guidance suggests that a project with emissions meeting Level A thresholds would require the most basic mitigation measures, projects with projected emissions in the Level B range would require more extensive mitigation measures, and projects with emissions exceed Level C thresholds would require the most extensive mitigation measures. Projects within the Level A and Level B ranges are considered potentially significant in the NSAQMD guidance and may be reduced to a less-than-significant level with the incorporation of NSAQMD-developed measures to address emissions for each level. The guidelines specifically state:

> These thresholds are recommended for use by lead agencies when preparing Initial Studies. If, during the preparation of the Initial Study, the lead agency finds that any of the following thresholds may be exceeded and cannot be mitigated down to Level B, then a determination of significant air quality impact must be made and an EIR is required. Therefore, typical projects that reduce emissions to Level B (i.e., below 136 lb/day) would not result in a significant impact.

NSAQMD does not have a threshold of significance for fine particulate matter ($PM_{2.5}$) emissions (NSAQMD 2009). NSAQMD also does not provide guidance for evaluating exposure to toxic air contaminants (TAC) (NSAQMD 2009).

TOWN OF TRUCKEE 2040 GENERAL PLAN

The Conservation and Open Space Element (COS) of the Town of Truckee 2040 General Plan contains goals and policies relating to air quality. Specifically, the following policies apply to the project:

- COS-8.7: Health Risk Assessments for Siting New Receptors
  Require developers of projects that would locate sensitive receptors (e.g., residences, schools, healthcare facilities) within 500 feet of Interstate 80 and 1,000 feet of the railway, consistent with the California Air Resources

Board's (CARB) buffer recommendations, to prepare health risk assessment (HRA) to determine the significance of the impact, and to incorporate project-specific mitigations to minimize or avoid risk.

- COS-8.10: Emission Standards for Diesel-Powered Off-Road Equipment
  Require any discretionary development project that would generate construction-related emissions at a level that exceeds NSAQMD thresholds to use off-road construction equipment that meets EPA Tier 4 emission standards (as defined in 40 CFR 1039) and to comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers or is demonstrated to the satisfaction of the Town to be otherwise unavailable. Alternatively, battery-electric off-road equipment may be used as it becomes available. Project applicants must submit a report or project improvement plan to the Town outlining a plan to fulfill this requirement prior to the use of any off-road, diesel-powered construction equipment.

3 OBJECTIVE STANDARDS OF ANALYSIS

HEALTH-BASED STANDARDS OF ANALYSIS

Policy COS-8.7 requires new development located within 500 feet of Interstate 80 or 1,000 feet of rail to conduct a quantitative HRA to determine project risk exposure. Because the project is within 1,000 feet of rail but beyond 500 feet from Interstate 80, the policy applies to the risk associated with the existing rail line and associated exposure at the proposed project site. However, the policy does not provide the specific health-based standards that should be used to conduct the analysis. As discussed above, the NSAQMD has not established quantitative health-based standards of analysis for TACs. The U.S. Environmental Protection Agency (EPA) has established guidance for evaluating risk exposure from existing emissions sources on new development and concentration-based standards for $PM_{2.5}$. In addition, other air districts in California, such as the Bay Area Air Quality Management District (BAAQMD), have established health-based thresholds for use during CEQA evaluation, ultimately derived from EPA guidance. Both project-level (i.e., new sources) and cumulative-level (exposure from existing sources) have been established. Considering the project is in California, reliance on the BAAQMD standards of significance would apply. A significant impact to the project would occur, if it were exposed to:

- Carcinogenic risk from the nearby railroad of greater than 100 in one million;
- Chronic Health Hazard from the nearby railroad exceeding 10 on the Health Hazard Index; or
- $PM_{2.5}$ concentrations from the nearby railroad that exceed 0.8 $\mu g/m^3$.

CONSTRUCTION MASS EMISSIONS STANDARDS OF ANALYSIS

Policy COS-8.10 requires that project-related construction emissions be quantified to determine if emissions would exceed adopted NSAQMD thresholds of significance, requiring the use of cleaner-burner diesel-powered construction equipment (e.g., EPA-rated Tier 4 or 3). Based on the discussion above and the adopted NSAQMD thresholds, an air quality significant impact (requiring incorporation of higher-tiered equipment) would occur if:

- The project resulted in construction-related emissions that exceed 136 lbs/day of ROG, NOx, or PM_{10}.

4 HEALTH RISK ASSESSMENT

4.1 METHODOLOGY

The primary TAC evaluated was $PM_{2.5}$ exhaust (a surrogate for diesel particulate matter [diesel PM]). To determine health risk and pollutant concentrations at the proposed location of new residential structures (i.e., receptors), air dispersion modeling was conducted using site-specific parameters (e.g., terrain, meteorological data) to generate ground-level pollutant concentrations of $PM_{2.5}$. Dispersion modeling was conducted using CARB's approved American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee modeling system (AERMOD) Version 23132, with emission rates specific to emission sources (i.e., train operations) to obtain the actual ground-level concentrations for $PM_{2.5}$ and TACs at all receptors.

The air dispersion model included all standard regulatory default options, including the use of urban dispersion parameters and local terrain. The Town fits the definition of an urban area based on its population; thus, the urban dispersion option was used in the AERMOD dispersion runs to estimate air pollutant concentrations. The following input parameters were used in the model run:

- Projected Coordinate System: Universal Transverse Mercator (UTM) zone 10;
- Geographic Datum: North American Datum 1983 (NAD83);
- Period (i.e., annual) averaging concentrations for railway activity; and
- U.S. Geologic Survey North American Datum NAD 27 7.5-minute terrain data.

Pre-processed meteorological data collected at the Lake Tahoe Airport meteorological station from the year 2017-2021 were obtained from CARB to represent local weather conditions. The station is located 2.3 miles southeast of the project site, and the wind primarily blows to the north-northeast. This is the nearest station to the project site for which CARB meteorological data is available and is therefore the appropriate station to obtain data for this assessment.

Four residential receptors at the corner of the project site were evaluated for pollutant concentrations and potential health risks resulting from railway activities at Truckee Station, which is located approximately 400 feet to the south of the project site. All receptors were assigned a flagpole height of 1.5 meters to represent the average breathing level for individuals exposed at ground level.

The nearby rail accommodates both passenger trains (i.e., Amtrack Zephyr line) and freight. Because there is only one Amtrak line passing through this location, emissions sources from passenger trains include idle emissions (while the train is loading/unloading) and moving emissions while the train is arriving/departing. Passenger trains do not pass through this location without stopping. Regarding freight trains, these only pass through the Truckee Train Station so only moving emissions are associated with freight trains. Thus, three sources were modeled: one arriving/departing locomotive (passenger train), one idling locomotive (passenger train), and one moving locomotive source (freight). The source emission rates were calculated based on locomotive activities within the impact distance (i.e., 1,000 feet extending from Truckee station in both directions)

Diesel PM emissions from Amtrak passenger trains and Union Pacific freight trains were derived from PM_{10} emissions. The locomotive PM_{10} emissions were estimated by multiplying total locomotive horsepower hours by PM_{10} emission factors, consistent with methods in EPA Ports Emission Inventory Guidance (EPA 2022). The PM_{10} emission factor was estimated as a weighted average using California statewide megawatts per locomotive category (passenger or freight). Idling time was estimated at two minutes at the station (Railrat 2024). Passenger train travel time within the

impact distance was estimated using an acceleration rate of two miles per hour per minute, while freight travel time assumed a constant speed of 30 miles per hour. Assumptions and calculations are included in Attachment A.

Table 2 summarizes the locomotive activities and emission rates. Detailed source emission rates calculation and model configurations are included in Attachment A.

Table 2 Modeled Sources and Emissions Rates

Source	Amtrak passenger train[1]	Amtrak passenger train Idling	Union Pacific Freight[2]
Modeled Source Type	Line volume	Point	Line volume
Emission Period (s)	286	120	45.5
Emission Rate (g/s)	0.0115	0.0004	0.0156

Notes: s = second; g/s = grams per second

[1] California Zephyr Superliner, twice per day, 7 days per week, arriving and departing Truckee Station.

[2] Union Pacific freight, 25 passing per day, 7 days per week through Truckee Station.

Source: Modeled by Ascent in 2024.

The HRA calculated the health risk impacts at designated sensitive receptors using the Office of Environmental Health Hazard Assessment Guidance (OEHHA 2015). Residential receptor risks were based on a 30-year exposure duration. The input parameters of the risk analysis are consistent with OEEHA guidance (OEHHA2015), as shown in Table 3.

Table 3 Cancer and Non-Cancer Risk Parameters for Residential Receptors

Risk parameters	Value
Exposure Duration	30 years
Averaging Time	70 years
Starting Age	3rd Trimester
Exposure Frequency	0.96 (350 days per year)
FAH	0.85 for 3rd Trimester, 0.72 for 0-2 years old, 0.73 for 2-30 years old
Daily Breathing Rate	the 95th percentile for < 2 years old, and the 80th percentile for >= 2 years old

Notes: FAH= fraction of time at home

Source: OEHHA 2015.

In addition to cancer risk, $PM_{2.5}$ concentrations were modeled. Dispersion modeling of $PM_{2.5}$ using the AERMOD model was conducted in the same manner as the diesel PM modeling, and the annual average $PM_{2.5}$ concentrations were generated from AERMOD outputs.

4.2 RESULTS

Based on the emissions rates calculated for freight and passenger rail and the air dispersion model conducted, the resultant risk and $PM_{2.5}$ concentrations at the project site were evaluated, as shown below in Table 4. Figure 1 shows the location and risk values of the maximally exposed individual resident (MEIR) onsite.

Table 4 Summary of Risk Results at the Proposed Project Site

Risk Type	Value	Threshold	Exceeds?
Cancer Risk (chances in one million)	0.404	100	No
Chronic Health Hazard	<1	10	No
$PM_{2.5}$ (ug/m3) Concentration	0.00073	0.8	No

Notes: Risk values compared to BAAQMD thresholds (Cancer Risk, Chronic Health, and $PM_{2.5}$ concentrations), which are based on EPA guidance.

1. Cancer Risk is evaluated based on the probability (chances of one in one million) of a person contracting cancer from the modeled source (I.e., train exhaust emissions), not accounting for other risk sources in the vicinity.
2. Chronic Health Hazard index is an index that estimates the likelihood of non-cancer health effects in people exposed to a toxic pollutant.
3. $PM_{2.5}$ concentrations are reported in micrograms per cubic meter

Source: Modeled by Ascent in 2024.

Source:

Figure 1 Risk Results at the Proposed Project Site

5 CONSTRUCTION EMISSION ASSESSMENT

5.1 METHODOLOGY

Criteria air pollutant and precursor emissions from the construction of the project were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1, which is the latest model tool available at the time of the analysis. Modeling inputs included project-specific land use types and sizes and construction phasing, timing and activities provided by the project applicant. Specific information included an anticipated maximum activity of equipment use for the first three to four days of between six and eight hours per day. Thus, the modeling applied the maximum eight hours per day of equipment use for the initial grading activity. Subsequent phases would require minimal site preparation and grading activity thus daily equipment use was adjusted down to six hours per day for subsequent grading activities occurring in phases 2 and 3. Model defaults were used when project-specific data were not available. The construction was assumed to progress through three phases, with 80 percent of the site being graded in Phase 1 and subsequently constructing Building A. Phase 2 was assumed to require grading for 10 percent of the site, then the construction of Buildings B and C, and finally Phase 3 would grade the remaining 10 percent of the site, and construct Building D. Project phasing and schedule is summarized below in Table 5 and the anticipated construction equipment type and daily use is shown below in Table 6.

Table 5 Construction Phasing and Scheduling

Project Phases	Construction Phase	Start	End	Workdays
1	Grading	5/1/2025	10/15/2025	120
	Building	10/16/2025	9/12/2026	237
	Paving	9/13/2026	9/30/2026	12
	Architectural Coating	10/1/2026	10/15/2026	12
2	Grading	5/1/2027	8/15/2027	75
	Building	8/16/2027	9/11/2028	280
	Paving	9/12/2028	9/30/2028	13
	Architectural Coating	10/1/2028	10/15/2028	13
3	Grading	5/1/2029	8/15/2029	77
	Building	8/16/2029	9/6/2030	276
	Paving	9/7/2030	9/27/2030	14
	Architectural Coating	9/28/2030	10/15/2030	14

Source: Whelan, 2024.

Table 6 Construction Equipment

Construction Activity	Equipment Type	Hours Per Day	Number per Day	Horsepower	Load Factor
Grading[1]	Rubber Tired Dozers	8	1	104	0.4
	Excavators	8	1	36	0.38
	Plate Compactors	8	1	8	0.43
Building Construction	Tractors/Loaders/Backhoes	6	1	84	0.37
	Cranes	6	1	367	0.29

Construction Activity	Equipment Type	Hours Per Day	Number per Day	Horsepower	Load Factor
	Forklifts	6	1	82	0.2
	Generator Sets	8	1	14	0.74
	Welders	8	3	46	0.45
Paving	Tractors/Loaders/Backhoes	8	1	84	0.37
	Pavers	6	1	81	0.42
	Paving Equipment	8	1	89	0.36
	Rollers	7	1	36	0.38
	Cement and Mortar Mixers	6	1	10	0.56
Architectural Coating	Air Compressors	6	1	37	0.48

Notes:

[1]Grading for phase 1 assumed a maximum activity scenario of 8 hours per day and subsequent phases would require less activity, which was adjusted down to 6 hours per day.

Source: Modeled by Ascent, 2024.

5.2 RESULTS

Based on the anticipated construction phasing and equipment (Tables 5 and 6), construction emissions in comparison to NSAQMD thresholds of significance (lbs/day) are summarized below in Table 7.

Table 7 Construction Maximum Daily Emissions

Year	NOx (lbs/day)	ROG (lbs/day)	PM10 (lbs/day)[1]
2025	9.1	1	2.9
2026	8.7	32.1	>1
2027	10.0	1.3	2.1
2028	9.5	104	<1
2029	7.8	<1	2.1
2030	7.6	77.3	<1
NSAQMD Threshold A	0-24	0-24	0-79
Threshold A Exceeded?	No	Yes	No
NSAQMD Threshold B	24-136	24-136	79-136
Threshold B Exceeded?	No	No	No
NSAQMD Threshold C	136	136	136
Threshold C Exceeded?	No	No	No

Notes: NOx = oxides of nitrogen; ROG = reactive organic compounds; PM10 = respirable particulate matter; lbs/day = pounds per day.

Source: Modeled by Ascent in 2024.

As shown above, in Table 7, NOx and PM_{10} emissions would not exceed Level A thresholds, but ROG would. ROG exceedances are due to application of architectural coatings that contain volatile organic compounds (VOCs); however, as described above NSAMQD only considers a significant impact, requiring further CEQA evaluation, to occur if emissions cannot be reduced to at least level B thresholds. Further, NSAQMD does not recommend any

reduction measures to address ROG emissions from architectural coatings as these emissions sources are regulated through adopted Rules (i.e., Rule 203) that establish VOC limits for various construction and architectural coatings. No pollutants exceed Level B thresholds and, thus, would also not exceed Level C Thresholds. NO_x emissions are primarily a result of exhaust from construction equipment and PM_{10} emissions are a result of airborne dust from earth-moving activities and exhaust emissions. Exhaust emissions would not exceed any level thresholds. In addition, the requirement of using Tier 4 engines (per COS-8.10) directly address tailpipe emissions from heavy-duty equipment, not off-gassing emissions from architectural coatings. In accordance with NSAQMD guidance, a significant air quality significant impact would occur if project-generated emissions exceeded Level C thresholds (i.e., 136 lbs/day) for NO_x, ROG, or PM_{10}. Project construction would not exceed this level; thus, the project would not result in a significant air quality impact.

6 CONCLUSION

Health risk exposure from diesel PM and $PM_{2.5}$ concentrations associated with the nearby railroad were modeled at the proposed project site and found to be below all applicable health-based thresholds. The project site would not be exposed to substantial pollutant concentrations from the nearby railroad. In addition, project-generated construction emissions were modeled and evaluated against NSAQMD thresholds of significance and found not to exceed Level B or Level C thresholds; thus, would not result in a significant air quality impact requiring further environmental review. The project would not require the implementation of Tier 4 engines during construction. Based on the analysis conducted, the project complies with General Plan Policy COS-8.7 and COS-8.10, and no mitigation is required.

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7 REFERENCES

BAAQMD. See Bay Area Air Quality Management District.

Bay Area Air Quality Management District. 2022. California Environmental Quality Act Air Quality Guidelines. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed August, 2024.

EPA. See United States Environmental Protection Agency.

OEHHA. See Office of Environmental Health Hazard Assessment.

Office of Environmental Health Hazard Assessment. 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. Available: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed July 22, 2024.

Northern Sierra Air Quality Management District. 2009. Guidelines for Assessing and Mitigating Air Quality Impacts of Land Use Projects.

Railrat 2024. Train Arrival and departure updates for Truckee, CA. Available: https://railrat.net/. Accessed: August, 2024.

Town of Truckee. 2023. Town of Truckee 2040 General Plan. Available: https://www.townoftruckee.gov/307/2040-General-Plan. Accessed August 2024.

United States Environmental Protection Agency. 2022. Ports Emissions Inventory Guidance: Methodologies for Estimating Port-Related and Goods Movement Mobile Source Emissions. Available: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1014J1S.pdf. Accessed July 30, 2024

Whelan, Sean. 2024. Email communication on July 22, 2024 between Sean Whelan and Dimitri Antoniou (Ascent), regarding project construction phasing.

Attachment A

- Construction Mass Emissions CalEEMod Output
- Health Risk Assessment Inputs and Outputs

CalEEMod Input

Landuse

Construction Phase	1	2	3	Sum
Buiding	A	B-C	D	
Land Use	R	R+C	R+C	
DU_R	15	32	15	
Area_floor_R	12,086	40,489	33,398	85,973
Area_floor_C	0	2,230	1,109	3,339
Area_Buiding total	12,086	42,719	34,507	89,312
Parking Space_garage	9	33	16	
Parking Space_stalls	1	8	5	
Parking Space_total	10	39	20	69
Landscape proportion	0.14	0.47	0.39	
Landscape area	290	972	802	2,064

Notes:
R=Residential, C=Commercial

Parking total =	0.5	space/DU
Lot acreage =	1.67	
Landscape area =	2,064	SF

Construction Schedule

CalEEMod run	Phase	Start	End	Workdays
	Grading	5/1/2025	10/15/2025	120
	Building	10/16/2025	9/12/2026	237
	Paving	9/13/2026	9/30/2026	12
1	Architectural Coating	10/1/2026	10/15/2026	12
	Grading	5/1/2027	8/15/2027	75
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	Paving	9/7/2030	9/27/2030	14
3	Architectural Coating	9/28/2030	10/15/2030	14

caleemod default
200
10
261 10
768
220
10
305 10
304

Material Moving

Project Total

CY of cut	4,288
CY of fill	767
CY of Export =	3,521

Assigned to Phases

Construction Phase	CY of cut	CY of fill	Assiged CY of Export
1	3,430	614	2,817
2	429	77	352
3	429	77	352
Total	4,288	768	3,521

Assume 80% of total for Phase 1 and 10% each for Phase 2 and 3.
Applied Policy COS-8.3 Dust Control Measure, Town of Truckee 2040 General Plan.

Equipment Used for Each Phase

Phase Name	Equipment Type	Fuel Type	Hours Per Day	Number per Day	Horsepower	Load Factor
Grading	Rubber Tired Dozers	Diesel	8	1	104	0.4
Grading	Excavators	Diesel	8	1	36	0.38
Grading	Plate Compactors	Diesel	8	1	8	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	6	1	84	0.37
Building Construction	Cranes	Diesel	6	1	367	0.29
Building Construction	Forklifts	Diesel	6	1	82	0.2
Building Construction	Generator Sets	Diesel	8	1	14	0.74
Building Construction	Welders	Diesel	8	3	46	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	8	1	84	0.37
Paving	Pavers	Diesel	6	1	81	0.42
Paving	Paving Equipment	Diesel	8	1	89	0.36
Paving	Rollers	Diesel	7	1	36	0.38
Paving	Cement and Mortar Mixers	Diesel	6	1	10	0.56
Architectural Coating	Air Compressors	Diesel	6	1	37	0.48

Note: Hours per Day for Grading varies slightly from Phase 1 to Phase 3. See table below.

Equipment Use

Grading — Provided Equip

Dozer

Excavator

Compactor

Dump Truck

Grading Equipment Usage

Max Usage 8 hours/day

# of Days at Max Usage 4 Initial max. grading would occur for 3-4 days

Reduced Usage 6 hours/day

intense grading as phase 1 would entail initial mass grading (see project information provided below)

Phase	Workdays	# of Days at Reduced Usage	Avg Hours/day
1	120	116	6.066666667
2	75	71	6.106666667
3	77	73	6.103896104

Other phases — CalEEMod default

Applicant-Provided Project Construction Information

---------- Forwarded message ---------
From: **Dimitri Antoniou** <dimitri.antoniou@ascent.inc>
Date: Mon, Jul 1, 2024 at 4:20 PM
Subject: RE: Noise and Health Assessments for Jibboom St
To: Sean Whelan <seanwhelan@mac.com>, Adam Petersen <apetersen@townoftruckee.com>, Jenna Gatto <jgatto@townoftruckee.com>, Matthew McFalls <Matthew.McFalls@ascent.inc>
Cc: Kurt Reinkens <kurt@mwa-truckee.com>, Lindy Winter <lindy@mwa-truckee.com>

Thanks for the introduction, Sean, and hello Adam and Jenna.

We are getting things moving on the analyses and will be sure to keep the team posted. I wanted to also introduce Matt McFalls, who will play a role in leading some of the work. In addition, I will be on vacation July 2-12, so he can respond if anything comes up.

To move things along, we do need some preliminary information regarding construction, see below:

1. Anticipated construction and construction phases (e.g., start month/year of grading, site prep, construction)

   Note: Grading is minimal on this site. Majority of site is near finish grade. Like top 12" inches in most cases will be scarified and recompacted to subgrade.

   - Currently Phase 1 is anticipated to start May 1, 2025 with grading finishing October 15, 2025. Phase 1 will include majority of all grading and utilities installation, Jibboom Street Frontage and construction of Building A. Completion of this phase including building estimated October 15, 2026.
   - Phase 2 anticipated to start May 1, 2027. Grading anticipated for this phase will be minimal as most completed in previous phase, but will include digging for foundation of Building B&C and installation of utility connections stubbed from the previous phase and drainage facilities. Grading likely completed around August 15, 2027 with Completion of this phase October 15, 2028.
   - Phase 3 anticipated to start May 1, 2029. Grading anticipated for this phase will be minimal as most completed in previous phase, but will include digging for foundation of Building D and installation of utility connections stubbed from the 1st phase. Grading likely completed around August 15, 2029 with Completion of this phase October 15, 2030.

2. Anticipated number / type of equipment for each phase (e.g., 1 dozer, 1 loader)

   - For Phase 1, a single small dozer, excavator, sheeps foot compactor and dump truck will be utilized to finalize the grading onsite, install utilities/drainage trenching and prepare subgrade for installation of buildings and frontage/access improvements. Subsequent phases will be similar, but not require a dozer as majority of grading will be complete.

3. Anticipated work hours per day for each phase or per equipment.
   - Equipment utilized will occur approximately 6-8 hours per day for the initial 3, or 4 days of construction during Phase 1 to complete mass grading. Equipment will then be selectively used for specific component construction such as installation of a joint utilities trench, or digging of building footings, etc. as those components sequentially are necessary to be installed.

4. Anticipated quantities of soil import/export (cubic yards)

   Note: if the above information is unknown, we can use model defaults.
   - Note: Most of the site is already close to finish grade, but some excavation / export will be necessary to get to subgrade elevations. The site is anticipated to have 4,288 CY of Cut, 767 CY of Fill for 3,521 CY of export.

Thank you!

Dimitri Antoniou, AICP

Jibboom Phase 1 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Jibboom Phase 1
Construction Start Date	5/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.00
Precipitation (days)	2.20
Location	10075 Jibboom St, Truckee, CA 96161, USA
County	Nevada
City	Truckee
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-H
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.26

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
Apartments Low Rise	15.0	Dwelling Unit	1.67	12,086	290	—	34.0	—

User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0.00	—	—	—
Enclosed Parking Structure	10.0	Space	0.09	4,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	32.1	32.1	8.68	10.6	0.02	0.29	2.67	2.92	0.27	1.34	1.57	—	1,950	1,950	0.08	0.04	0.69	1,960
Mit.	32.0	32.0	4.44	11.6	0.02	0.06	2.67	2.69	0.06	1.34	1.36	—	1,950	1,950	0.08	0.04	0.69	1,960
% Reduced	< 0.5%	< 0.5%	49%	-10%	—	78%	—	8%	77%	—	13%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.1	32.1	9.08	10.7	0.02	0.33	2.67	2.92	0.30	1.34	1.57	—	1,945	1,945	0.08	0.04	0.02	1,955
Mit.	32.0	32.0	4.47	11.6	0.02	0.06	2.67	2.69	0.06	1.34	1.36	—	1,945	1,945	0.08	0.04	0.02	1,955
% Reduced	< 0.5%	< 0.5%	51%	-9%	—	80%	—	8%	80%	—	13%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	1.72	1.61	4.51	5.53	0.01	0.15	0.89	1.02	0.14	0.44	0.57	—	1,011	1,011	0.04	0.02	0.14	1,016
Mit.	1.25	1.24	2.29	6.05	0.01	0.03	0.89	0.91	0.03	0.44	0.46	—	1,011	1,011	0.04	0.02	0.14	1,016
% Reduced	27%	23%	49%	-10%	—	79%	—	11%	78%	—	19%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31	0.29	0.82	1.01	< 0.005	0.03	0.16	0.19	0.03	0.08	0.10	—	167	167	0.01	< 0.005	0.02	168
Mit.	0.23	0.23	0.42	1.10	< 0.005	0.01	0.16	0.17	0.01	0.08	0.08	—	167	167	0.01	< 0.005	0.02	168
% Reduced	27%	23%	49%	-10%	—	79%	—	11%	78%	—	19%	—	—	—	—	—	—	—

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	0.66	0.56	4.65	4.38	0.01	0.25	2.67	2.92	0.23	1.34	1.57	—	827	827	0.03	0.04	0.69	840
2026	32.1	32.1	8.68	10.6	0.02	0.29	0.11	0.40	0.27	0.03	0.30	—	1,950	1,950	0.08	0.03	0.54	1,960
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.35	1.13	9.08	10.7	0.02	0.33	2.67	2.92	0.30	1.34	1.57	—	1,945	1,945	0.08	0.04	0.02	1,955
2026	32.1	32.1	8.70	10.5	0.02	0.29	0.11	0.40	0.27	0.03	0.30	—	1,943	1,943	0.08	0.03	0.01	1,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.42	0.35	2.90	3.03	0.01	0.13	0.89	1.02	0.12	0.44	0.57	—	564	564	0.02	0.02	0.14	570
2026	1.72	1.61	4.51	5.53	0.01	0.15	0.06	0.21	0.14	0.01	0.15	—	1,011	1,011	0.04	0.01	0.12	1,016
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.06	0.53	0.55	< 0.005	0.02	0.16	0.19	0.02	0.08	0.10	—	93.4	93.4	< 0.005	< 0.005	0.02	94.3
2026	0.31	0.29	0.82	1.01	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	167	167	0.01	< 0.005	0.02	168

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	0.15	0.14	1.39	4.36	0.01	0.02	2.67	2.69	0.02	1.34	1.36	—	827	827	0.03	0.04	0.69	840
2026	32.0	32.0	4.44	11.6	0.02	0.06	0.11	0.17	0.06	0.03	0.09	—	1,950	1,950	0.08	0.03	0.54	1,960
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.39	0.36	4.47	11.6	0.02	0.06	2.67	2.69	0.06	1.34	1.36	—	1,945	1,945	0.08	0.04	0.02	1,955
2026	32.0	32.0	4.46	11.6	0.02	0.06	0.11	0.17	0.06	0.03	0.09	—	1,943	1,943	0.08	0.03	0.01	1,952
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.11	0.10	1.13	3.17	0.01	0.02	0.89	0.91	0.02	0.44	0.46	—	564	564	0.02	0.02	0.14	570
2026	1.25	1.24	2.29	6.05	0.01	0.03	0.06	0.09	0.03	0.01	0.05	—	1,011	1,011	0.04	0.01	0.12	1,016
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.02	0.02	0.21	0.58	< 0.005	< 0.005	0.16	0.17	< 0.005	0.08	0.08	—	93.4	93.4	< 0.005	< 0.005	0.02	94.3
2026	0.23	0.23	0.42	1.10	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	167	167	0.01	< 0.005	0.02	168

3. Construction Emissions Details

3.1. 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-Roa Equipment	0.61	0.51	4.36	3.93	0.01	0.25	—	0.25	0.23	—	0.23	—	564	564	0.02	< 0.005	—	566
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
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	0.51	4.36	3.93	0.01	0.25	—	0.25	0.23	—	0.23	—	564	564	0.02	< 0.005	—	566
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
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	0.20	0.17	1.43	1.29	< 0.005	0.08	—	0.08	0.08	—	0.08	—	185	185	0.01	< 0.005	—	186
Dust From Material Movement	—	—	—	—	—	—	0.84	0.84	—	0.43	0.43	—	—	—	—	—	—	—
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	0.03	0.26	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.7	30.7	< 0.005	< 0.005	—	30.8

Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.26	61.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.26	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.43	213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.36	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.4	56.4	< 0.005	< 0.005	0.01	57.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.27	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.04	19.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.7	66.7	< 0.005	0.01	0.06	70.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.11	3.11	< 0.005	< 0.005	0.01	3.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.6

3.2. 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	0.10	0.09	1.11	3.91	0.01	0.02	—	0.02	0.02	—	0.02	—	564	564	0.02	< 0.005	—	566
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
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	0.10	0.09	1.11	3.91	0.01	0.02	—	0.02	0.02	—	0.02	—	564	564	0.02	< 0.005	—	566
Dust From Material Movement	—	—	—	—	—	—	2.56	2.56	—	1.31	1.31	—	—	—	—	—	—	—
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	0.03	0.03	0.36	1.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	185	185	0.01	< 0.005	—	186
Dust From Material Movement	—	—	—	—	—	—	0.84	0.84	—	0.43	0.43	—	—	—	—	—	—	—

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	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.7	30.7	< 0.005	< 0.005	—	30.8
Dust From Material Movement	—	—	—	—	—	—	0.15	0.15	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.26	61.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.26	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.43	213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.36	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	56.4	56.4	< 0.005	< 0.005	0.01	57.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.27	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.01	0.02	—	203	203	< 0.005	0.03	0.01	213
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.8	18.8	< 0.005	< 0.005	0.04	19.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.7	66.7	< 0.005	0.01	0.06	70.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.11	3.11	< 0.005	< 0.005	0.01	3.16

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.01	11.6

3.3. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.19	0.16	1.35	1.51	< 0.005	0.05	—	0.05	0.05	—	0.05	—	271	271	0.01	< 0.005	—	272
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	0.03	0.25	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.9	44.9	< 0.005	< 0.005	—	45.1
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	0.07	0.06	0.06	0.59	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.8	93.8	0.01	< 0.005	0.01	95.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.2	50.2	< 0.005	0.01	< 0.005	52.5
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	0.01	0.01	0.01	0.09	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.03	14.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.57	7.57	< 0.005	< 0.005	0.01	7.91
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.37	2.37	< 0.005	< 0.005	< 0.005	2.41
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.31
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. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.32	0.30	4.34	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.05	0.05	0.65	1.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	271	271	0.01	< 0.005	—	272
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	0.12	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.9	44.9	< 0.005	< 0.005	—	45.1
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	0.07	0.06	0.06	0.59	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.8	93.8	0.01	< 0.005	0.01	95.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.2	50.2	< 0.005	0.01	< 0.005	52.5
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	0.01	0.01	0.01	0.09	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.03	14.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.57	7.57	< 0.005	< 0.005	0.01	7.91
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.37	2.37	< 0.005	< 0.005	< 0.005	2.41
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.31
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. 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	1.22	1.01	8.57	9.96	0.02	0.29	—	0.29	0.27	—	0.27	—	1,801	1,801	0.07	0.01	—	1,807
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	1.22	1.01	8.57	9.96	0.02	0.29	—	0.29	0.27	—	0.27	—	1,801	1,801	0.07	0.01	—	1,807
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	0.61	0.51	4.28	4.97	0.01	0.15	—	0.15	0.13	—	0.13	—	899	899	0.04	0.01	—	902

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	0.11	0.09	0.78	0.91	< 0.005	0.03	—	0.03	0.02	—	0.02	—	149	149	0.01	< 0.005	—	149
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	0.07	0.06	0.04	0.60	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.6	99.6	0.01	< 0.005	0.41	101
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.2	49.2	< 0.005	0.01	0.13	51.6
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.56	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	92.3	92.3	0.01	< 0.005	0.01	93.7
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.3	49.3	< 0.005	0.01	< 0.005	51.5
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	0.03	0.03	0.02	0.27	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.7	46.7	< 0.005	< 0.005	0.09	47.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.6	24.6	< 0.005	< 0.005	0.03	25.7
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	7.86
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.07	4.07	< 0.005	< 0.005	< 0.005	4.26
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

3.6. 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	0.32	0.30	4.33	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.32	0.30	4.33	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.15	2.16	5.49	0.01	0.03	—	0.03	0.03	—	0.03	—	899	899	0.04	0.01	—	902
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	0.39	1.00	< 0.005	0.01	—	0.01	0.01	—	0.01	—	149	149	0.01	< 0.005	—	149

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	0.07	0.06	0.04	0.60	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.6	99.6	0.01	< 0.005	0.41	101
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.2	49.2	< 0.005	0.01	0.13	51.6
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.56	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	92.3	92.3	0.01	< 0.005	0.01	93.7
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.3	49.3	< 0.005	0.01	< 0.005	51.5
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	0.03	0.03	0.02	0.27	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.7	46.7	< 0.005	< 0.005	0.09	47.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.6	24.6	< 0.005	< 0.005	0.03	25.7
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.73	7.73	< 0.005	< 0.005	0.01	7.86
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.07	4.07	< 0.005	< 0.005	< 0.005	4.26
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

3.7. Paving (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	0.56	0.47	4.41	6.48	0.01	0.18	—	0.18	0.17	—	0.17	—	991	991	0.04	0.01	—	995
Paving	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	0.15	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.6	32.6	< 0.005	< 0.005	—	32.7
Paving	< 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	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.40	5.40	< 0.005	< 0.005	—	5.41
Paving	< 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	0.07	0.06	0.04	0.60	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.7	99.7	0.01	< 0.005	0.41	101

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.08	3.08	< 0.005	< 0.005	0.01	3.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (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	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	995
Paving	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	< 0.005	< 0.005	0.04	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.6	32.6	< 0.005	< 0.005	—	32.7
Paving	< 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	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.40	5.40	< 0.005	< 0.005	—	5.41
Paving	< 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	0.07	0.06	0.04	0.60	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	99.7	99.7	0.01	< 0.005	0.41	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.08	3.08	< 0.005	< 0.005	0.01	3.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.51	0.51	< 0.005	< 0.005	< 0.005	0.52

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2026) - Unmitigated

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

Location	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	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	31.9	31.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	31.9	31.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	1.05	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.08	20.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	< 0.005	18.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Architectural Coating (2026) - Mitigated

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

Location	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	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	31.9	31.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	31.9	31.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.39	4.39	< 0.005	< 0.005	—	4.40
Architectural Coatings	1.05	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.73	0.73	< 0.005	< 0.005	—	0.73
Architectural Coatings	0.19	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.08	20.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	< 0.005	18.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	5/1/2025	10/15/2025	5.00	120	—
Building Construction	Building Construction	10/16/2025	9/12/2026	5.00	237	—
Paving	Paving	9/13/2026	9/29/2026	5.00	12.0	—
Architectural Coating	Architectural Coating	9/30/2026	10/15/2026	5.00	12.0	—

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
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	104	0.40
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	104	0.40
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT

Grading	Hauling	2.94	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	12.5	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.26	7.02	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.50	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT
Grading	Hauling	2.94	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	12.5	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.26	7.02	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.50	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	24,474	8,158	176	19.6	235

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	2,817	45.5	0.00	—
Paving	0.00	0.00	0.00	0.00	0.09

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
User Defined Commercial	0.00	0%
Enclosed Parking Structure	0.09	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	0.00	453	0.03	< 0.005
2026	0.00	453	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	31.3	annual days of extreme heat
Extreme Precipitation	8.60	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	18.2	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A

Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	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 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	57.8
AQ-PM	42.6
AQ-DPM	42.8
Drinking Water	23.1
Lead Risk Housing	20.0
Pesticides	46.0
Toxic Releases	42.4
Traffic	25.9
Effect Indicators	—

CleanUp Sites	58.2
Groundwater	54.5
Haz Waste Facilities/Generators	82.5
Impaired Water Bodies	23.9
Solid Waste	95.3
Sensitive Population	—
Asthma	19.9
Cardio-vascular	1.98
Low Birth Weights	24.6
Socioeconomic Factor Indicators	—
Education	43.1
Housing	12.8
Linguistic	18.9
Poverty	45.7
Unemployment	0.20

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	60.22071089
Employed	97.89554729
Median HI	61.54240985
Education	—
Bachelor's or higher	52.02104453
High school enrollment	4.38855383
Preschool enrollment	23.02065957
Transportation	—

Auto Access	42.71782369
Active commuting	56.66623893
Social	—
2-parent households	75.63197742
Voting	76.8766842
Neighborhood	—
Alcohol availability	81.44488644
Park access	43.28243295
Retail density	30.16809958
Supermarket access	27.06274862
Tree canopy	96.58668035
Housing	—
Homeownership	47.00372129
Housing habitability	60.06672655
Low-inc homeowner severe housing cost burden	96.88181702
Low-inc renter severe housing cost burden	42.33286283
Uncrowded housing	55.74233286
Health Outcomes	—
Insured adults	32.84999358
Arthritis	0.0
Asthma ER Admissions	99.0
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	85.5

Cognitively Disabled	93.6
Physically Disabled	98.1
Heart Attack ER Admissions	98.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
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	19.7
SLR Inundation Area	0.0
Children	29.7
Elderly	96.3
English Speaking	52.8
Foreign-born	54.0
Outdoor Workers	17.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.7
Traffic Density	29.3
Traffic Access	0.0
Other Indices	—
Hardship	30.7
Other Decision Support	—

2016 Voting	59.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Provided. Landscape area is total landscape area of the project 2,064 SF multiplied by BSF of building A divided by BSF of all buildings (A, B-C, D).
Construction: Construction Phases	Dates are provided for Grading (start and end), start of Building Construction and end of Architectural Coating. The numbers of workdays for Building Construction, Paving, and Architectural Coating were scaled accordingly with the default ratios of workdays between these construction phases.

Construction: Off-Road Equipment	Equipment list was provided for Grading phase. Hours/day adjusted for Grading Phase as follows: the average hours/day calculated based on 8 hours/day for 4 initial days, and 6 hours/day for the rest of days during grading. Use 104 HP for small size dozer (Cat small dozer model D3). Default equipment for other phases.

Jibboom Phase 2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Jibboom Phase 2
Construction Start Date	5/1/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.00
Precipitation (days)	2.20
Location	10075 Jibboom St, Truckee, CA 96161, USA
County	Nevada
City	Truckee
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-H
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.26

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
Apartments Low Rise	32.0	Dwelling Unit	1.67	40,489	972	—	73.0	—

User Defined Commercial	1.00	User Defined Unit	0.00	2,230	0.00	—	—	—
Enclosed Parking Structure	39.0	Space	0.35	15,600	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	104	104	9.97	13.2	0.02	0.32	1.98	2.12	0.30	1.00	1.12	—	2,574	2,574	0.10	0.05	1.28	2,592
Mit.	103	103	5.28	14.7	0.02	0.09	1.98	2.00	0.09	1.00	1.02	—	2,574	2,574	0.10	0.05	1.28	2,592
% Reduced	1%	< 0.5%	47%	-12%	—	71%	—	6%	70%	—	10%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	103	103	10.0	13.0	0.02	0.32	0.26	0.59	0.30	0.06	0.36	—	2,557	2,557	0.10	0.05	0.03	2,573
Mit.	103	103	5.33	14.6	0.02	0.09	0.26	0.36	0.09	0.06	0.15	—	2,557	2,557	0.10	0.05	0.03	2,573
% Reduced	< 0.5%	< 0.5%	47%	-12%	—	71%	—	39%	70%	—	58%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	4.42	4.30	4.96	6.78	0.01	0.15	0.48	0.59	0.14	0.22	0.33	—	1,324	1,324	0.05	0.02	0.26	1,332
Mit.	3.96	3.94	2.72	7.58	0.01	0.05	0.48	0.51	0.04	0.22	0.25	—	1,324	1,324	0.05	0.02	0.26	1,332
% Reduced	10%	8%	45%	-12%	—	69%	—	15%	68%	—	24%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.81	0.79	0.90	1.24	< 0.005	0.03	0.09	0.11	0.03	0.04	0.06	—	219	219	0.01	< 0.005	0.04	221
Mit.	0.72	0.72	0.50	1.38	< 0.005	0.01	0.09	0.09	0.01	0.04	0.05	—	219	219	0.01	< 0.005	0.04	221
% Reduced	10%	8%	45%	-12%	—	69%	—	15%	68%	—	24%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.51	1.28	9.97	13.2	0.02	0.32	1.98	2.12	0.30	1.00	1.12	—	2,574	2,574	0.10	0.05	1.28	2,592
2028	104	104	9.49	13.0	0.02	0.29	0.26	0.55	0.26	0.06	0.33	—	2,567	2,567	0.10	0.05	1.19	2,585
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.51	1.27	10.0	13.0	0.02	0.32	0.26	0.59	0.30	0.06	0.36	—	2,557	2,557	0.10	0.05	0.03	2,573
2028	103	103	9.53	12.9	0.02	0.29	0.26	0.55	0.26	0.06	0.33	—	2,550	2,550	0.10	0.05	0.03	2,567
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.49	0.41	3.26	4.18	0.01	0.11	0.48	0.59	0.11	0.22	0.33	—	797	797	0.03	0.02	0.18	803
2028	4.42	4.30	4.96	6.78	0.01	0.15	0.14	0.29	0.14	0.03	0.17	—	1,324	1,324	0.05	0.02	0.26	1,332
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.09	0.08	0.60	0.76	< 0.005	0.02	0.09	0.11	0.02	0.04	0.06	—	132	132	0.01	< 0.005	0.03	133
2028	0.81	0.79	0.90	1.24	< 0.005	0.03	0.02	0.05	0.03	0.01	0.03	—	219	219	0.01	< 0.005	0.04	221

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.57	0.53	5.28	14.7	0.02	0.09	1.98	2.00	0.09	1.00	1.02	—	2,574	2,574	0.10	0.05	1.28	2,592
2028	103	103	5.23	14.6	0.02	0.09	0.26	0.35	0.09	0.06	0.15	—	2,567	2,567	0.10	0.05	1.19	2,585
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.57	0.52	5.33	14.6	0.02	0.09	0.26	0.36	0.09	0.06	0.15	—	2,557	2,557	0.10	0.05	0.03	2,573
2028	103	103	5.27	14.5	0.02	0.09	0.26	0.35	0.09	0.06	0.15	—	2,550	2,550	0.10	0.05	0.03	2,567
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.18	0.16	1.62	4.61	0.01	0.03	0.48	0.51	0.03	0.22	0.25	—	797	797	0.03	0.02	0.18	803
2028	3.96	3.94	2.72	7.58	0.01	0.05	0.14	0.18	0.04	0.03	0.08	—	1,324	1,324	0.05	0.02	0.26	1,332
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.03	0.03	0.30	0.84	< 0.005	0.01	0.09	0.09	< 0.005	0.04	0.05	—	132	132	0.01	< 0.005	0.03	133
2028	0.72	0.72	0.50	1.38	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	219	219	0.01	< 0.005	0.04	221

3. Construction Emissions Details

3.1. Grading (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-Roa Equipment	0.38	0.32	2.67	2.89	< 0.005	0.13	—	0.13	0.12	—	0.12	—	423	423	0.02	< 0.005	—	424
Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
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	0.08	0.06	0.55	0.59	< 0.005	0.03	—	0.03	0.03	—	0.03	—	86.8	86.8	< 0.005	< 0.005	—	87.1
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.9	58.9	< 0.005	< 0.005	0.23	59.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.6	38.6	< 0.005	0.01	0.07	40.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.38

3.2. Grading (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	0.07	0.07	0.83	2.94	< 0.005	0.01	—	0.01	0.01	—	0.01	—	423	423	0.02	< 0.005	—	424

Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
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	0.01	0.17	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	86.8	86.8	< 0.005	< 0.005	—	87.1
Dust From Material Movement	—	—	—	—	—	—	0.39	0.39	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.4	14.4	< 0.005	< 0.005	—	14.4
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.9	58.9	< 0.005	< 0.005	0.23	59.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.6	38.6	< 0.005	0.01	0.07	40.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.94	7.94	< 0.005	< 0.005	0.01	8.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.31	1.31	< 0.005	< 0.005	< 0.005	1.38

3.3. 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	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
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	1.35	1.13	9.70	11.7	0.02	0.32	—	0.32	0.30	—	0.30	—	2,201	2,201	0.09	0.02	—	2,208
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	0.37	0.30	2.62	3.16	0.01	0.09	—	0.09	0.08	—	0.08	—	594	594	0.02	< 0.005	—	596
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	0.07	0.06	0.48	0.58	< 0.005	0.02	—	0.02	0.01	—	0.01	—	98.4	98.4	< 0.005	< 0.005	—	98.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.09	1.38	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	238	238	0.01	0.01	0.94	242
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.34	142
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	0.15	0.13	0.12	1.27	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	221	221	0.01	0.01	0.02	224
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	141
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	0.04	0.04	0.03	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.4	60.4	< 0.005	< 0.005	0.11	61.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.5	36.5	< 0.005	0.01	0.04	38.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.00	10.00	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.05	6.05	< 0.005	< 0.005	0.01	6.32
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. 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	0.41	0.38	5.00	13.3	0.02	0.09	—	0.09	0.09	—	0.09	—	2,201	2,201	0.09	0.02	—	2,208
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	0.41	0.38	5.00	13.3	0.02	0.09	—	0.09	0.09	—	0.09	—	2,201	2,201	0.09	0.02	—	2,208
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	0.11	0.10	1.35	3.58	0.01	0.02	—	0.02	0.02	—	0.02	—	594	594	0.02	< 0.005	—	596
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	0.25	0.65	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.4	98.4	< 0.005	< 0.005	—	98.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.09	1.38	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	238	238	0.01	0.01	0.94	242
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.34	142
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	0.15	0.13	0.12	1.27	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	221	221	0.01	0.01	0.02	224
Vendor	0.01	0.01	0.20	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	141
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	0.04	0.04	0.03	0.34	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.4	60.4	< 0.005	< 0.005	0.11	61.3
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.5	36.5	< 0.005	0.01	0.04	38.2
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.00	10.00	< 0.005	< 0.005	0.02	10.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.05	6.05	< 0.005	< 0.005	0.01	6.32

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. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29	1.08	9.23	11.7	0.02	0.28	—	0.28	0.26	—	0.26	—	2,201	2,201	0.09	0.02	—	2,209
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	1.29	1.08	9.23	11.7	0.02	0.28	—	0.28	0.26	—	0.26	—	2,201	2,201	0.09	0.02	—	2,209
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	0.64	0.54	4.59	5.80	0.01	0.14	—	0.14	0.13	—	0.13	—	1,094	1,094	0.04	0.01	—	1,098
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 Equipm	0.12	0.10	0.84	1.06	< 0.005	0.03	—	0.03	0.02	—	0.02	—	181	181	0.01	< 0.005	—	182
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	0.15	0.14	0.08	1.29	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	234	234	0.01	0.01	0.88	238
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.31	138
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	0.14	0.13	0.11	1.19	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	217	217	0.01	0.01	0.02	220
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.01	138
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	0.07	0.07	0.05	0.58	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.19	111
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.5	65.5	< 0.005	0.01	0.07	68.5
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.01	11.3
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

3.6. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.38	4.97	13.3	0.02	0.09	—	0.09	0.08	—	0.08	—	2,201	2,201	0.09	0.02	—	2,209
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	0.41	0.38	4.97	13.3	0.02	0.09	—	0.09	0.08	—	0.08	—	2,201	2,201	0.09	0.02	—	2,209
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	0.20	0.19	2.47	6.59	0.01	0.04	—	0.04	0.04	—	0.04	—	1,094	1,094	0.04	0.01	—	1,098
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	0.03	0.45	1.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	181	181	0.01	< 0.005	—	182
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	0.15	0.14	0.08	1.29	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	234	234	0.01	0.01	0.88	238
Vendor	0.01	0.01	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.31	138
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	0.14	0.13	0.11	1.19	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	217	217	0.01	0.01	0.02	220
Vendor	0.01	0.01	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.01	138
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	0.07	0.07	0.05	0.58	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.19	111
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	65.5	65.5	< 0.005	0.01	0.07	68.5
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.4
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.8	10.8	< 0.005	< 0.005	0.01	11.3
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

3.7. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.73	0.61	5.53	8.18	0.01	0.20	—	0.20	0.19	—	0.19	—	1,244	1,244	0.05	0.01	—	1,248
Paving	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	0.03	0.02	0.20	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.3	44.3	< 0.005	< 0.005	—	44.5
Paving	< 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	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.33	7.33	< 0.005	< 0.005	—	7.36
Paving	< 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	0.07	0.07	0.04	0.64	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.43	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.88	3.88	< 0.005	< 0.005	0.01	3.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.28	2.37	8.64	0.01	0.07	—	0.07	0.06	—	0.06	—	1,244	1,244	0.05	0.01	—	1,248
Paving	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-Roa Equipment	0.01	0.01	0.08	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.3	44.3	< 0.005	< 0.005	—	44.5
Paving	< 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-Roa d Equipm ent	< 0.005	< 0.005	0.02	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.33	7.33	< 0.005	< 0.005	—	7.36
Paving	< 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	0.07	0.07	0.04	0.64	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.43	118
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.88	3.88	< 0.005	< 0.005	0.01	3.94
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.64	0.64	< 0.005	< 0.005	< 0.005	0.65
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	103	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.13	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	103	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.76	4.76	< 0.005	< 0.005	—	4.77

Architect Coatings	3.67	3.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	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	—	0.79	0.79	< 0.005	< 0.005	—	0.79
Architectural Coatings	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	46.8	46.8	< 0.005	< 0.005	0.18	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.4	43.4	< 0.005	< 0.005	< 0.005	44.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	1.57	1.57	< 0.005	< 0.005	< 0.005	1.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	103	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	103	103	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.76	4.76	< 0.005	< 0.005	—	4.77
Architectural Coatings	3.67	3.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.79	0.79	< 0.005	< 0.005	—	0.79
Architectural Coatings	0.67	0.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.26	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	46.8	46.8	< 0.005	< 0.005	0.18	47.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.4	43.4	< 0.005	< 0.005	< 0.005	44.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	1.57	1.57	< 0.005	< 0.005	< 0.005	1.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	5/1/2027	8/15/2027	5.00	75.0	—
Building Construction	Building Construction	8/16/2027	9/10/2028	5.00	280	—
Paving	Paving	9/11/2028	9/27/2028	5.00	13.0	—
Architectural Coating	Architectural Coating	9/27/2028	10/15/2028	5.00	13.0	—

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
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	104	0.40
Grading	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	6.00	104	0.40
Grading	Excavators	Diesel	Tier 4 Final	1.00	6.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	7.00	82.0	0.20
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	7.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Paving	Rollers	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT

Grading	Hauling	0.59	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.3	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	6.34	7.02	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.06	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT
Grading	Hauling	0.59	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.3	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	6.34	7.02	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.06	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	81,990	27,330	4,033	1,191	917

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Grading	—	352	28.6	0.00	—
Paving	0.00	0.00	0.00	0.00	0.35

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
User Defined Commercial	0.00	0%
Enclosed Parking Structure	0.35	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	453	0.03	< 0.005
2028	0.00	453	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	31.3	annual days of extreme heat
Extreme Precipitation	8.60	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	18.2	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A

Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	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 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	57.8
AQ-PM	42.6
AQ-DPM	42.8
Drinking Water	23.1
Lead Risk Housing	20.0
Pesticides	46.0
Toxic Releases	42.4
Traffic	25.9
Effect Indicators	—

CleanUp Sites	58.2
Groundwater	54.5
Haz Waste Facilities/Generators	82.5
Impaired Water Bodies	23.9
Solid Waste	95.3
Sensitive Population	—
Asthma	19.9
Cardio-vascular	1.98
Low Birth Weights	24.6
Socioeconomic Factor Indicators	—
Education	43.1
Housing	12.8
Linguistic	18.9
Poverty	45.7
Unemployment	0.20

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	60.22071089
Employed	97.89554729
Median HI	61.54240985
Education	—
Bachelor's or higher	52.02104453
High school enrollment	4.38855383
Preschool enrollment	23.02065957
Transportation	—

Auto Access	42.71782369
Active commuting	56.66623893
Social	—
2-parent households	75.63197742
Voting	76.8766842
Neighborhood	—
Alcohol availability	81.44488644
Park access	43.28243295
Retail density	30.16809958
Supermarket access	27.06274862
Tree canopy	96.58668035
Housing	—
Homeownership	47.00372129
Housing habitability	60.06672655
Low-inc homeowner severe housing cost burden	96.88181702
Low-inc renter severe housing cost burden	42.33286283
Uncrowded housing	55.74233286
Health Outcomes	—
Insured adults	32.84999358
Arthritis	0.0
Asthma ER Admissions	99.0
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	85.5

Cognitively Disabled	93.6
Physically Disabled	98.1
Heart Attack ER Admissions	98.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
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	19.7
SLR Inundation Area	0.0
Children	29.7
Elderly	96.3
English Speaking	52.8
Foreign-born	54.0
Outdoor Workers	17.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.7
Traffic Density	29.3
Traffic Access	0.0
Other Indices	—
Hardship	30.7
Other Decision Support	—

2016 Voting	59.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Provided. Landscape area is total landscape area of the project 2,064 SF multiplied by BSF of building B-C divided by BSF of all buildings (A, B-C, D).
Construction: Construction Phases	Dates are provided for Grading (start and end), start of Building Construction and end of Architectural Coating. The numbers of workdays for Building Construction, Paving, and Architectural Coating were scaled accordingly with the default ratios of workdays between these construction phases.

Construction: Off-Road Equipment	Equipment list was provided for Grading phase. Hours/day adjusted for Grading Phase as follows: the average hours/day calculated based on 8 hours/day for 4 initial days, and 6 hours/day for the rest of days during grading. Use 104 HP for small size dozer (Cat small dozer model D3). Default equipment for other phases.
Construction: Dust From Material Movement	Assumed 10% of project total of material movement 3,521 CY. Applied Policy COS-8.3 Dust Control Measure, Town of Truckee 2040 General Plan.

Jibboom Phase 3 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Jibboom Phase 3
Construction Start Date	5/1/2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.00
Precipitation (days)	2.20
Location	10075 Jibboom St, Truckee, CA 96161, USA
County	Nevada
City	Truckee
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-H
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.26

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
Apartments Low Rise	15.0	Dwelling Unit	1.67	33,398	802	—	34.0	—

User Defined Commercial	1.00	User Defined Unit	0.00	1,109	0.00	—	—	—
Enclosed Parking Structure	20.0	Space	0.18	8,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	77.3	77.3	7.75	10.4	0.02	0.21	1.98	2.08	0.19	1.00	1.09	—	1,974	1,974	0.08	0.03	0.53	1,985
Mit.	77.2	77.2	4.44	11.6	0.02	0.06	1.98	2.00	0.06	1.00	1.02	—	1,974	1,974	0.08	0.03	0.53	1,985
% Reduced	< 0.5%	< 0.5%	43%	-11%	—	70%	—	4%	69%	—	6%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	77.3	77.3	7.76	10.4	0.02	0.21	0.13	0.34	0.19	0.03	0.22	—	1,966	1,966	0.08	0.03	0.01	1,976
Mit.	77.2	77.2	4.46	11.6	0.02	0.06	0.13	0.19	0.06	0.03	0.09	—	1,966	1,966	0.08	0.03	0.01	1,976
% Reduced	< 0.5%	< 0.5%	43%	-11%	—	70%	—	44%	69%	—	60%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	3.53	3.44	3.87	5.32	0.01	0.10	0.45	0.53	0.09	0.22	0.29	—	1,000	1,000	0.04	0.01	0.11	1,006
Mit.	3.16	3.15	2.23	5.91	0.01	0.03	0.45	0.47	0.03	0.22	0.24	—	1,000	1,000	0.04	0.01	0.11	1,006
% Reduced	10%	8%	42%	-11%	—	69%	—	11%	67%	—	18%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.63	0.71	0.97	< 0.005	0.02	0.08	0.10	0.02	0.04	0.05	—	166	166	0.01	< 0.005	0.02	167
Mit.	0.58	0.57	0.41	1.08	< 0.005	0.01	0.08	0.09	0.01	0.04	0.04	—	166	166	0.01	< 0.005	0.02	167
% Reduced	10%	8%	42%	-11%	—	69%	—	11%	67%	—	18%	—	—	—	—	—	—	—

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.15	0.96	7.75	10.4	0.02	0.21	1.98	2.08	0.19	1.00	1.09	—	1,974	1,974	0.08	0.03	0.53	1,985
2030	77.3	77.3	7.59	10.4	0.02	0.20	0.13	0.32	0.18	0.03	0.21	—	1,970	1,970	0.08	0.03	0.49	1,981
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.14	0.96	7.76	10.4	0.02	0.21	0.13	0.34	0.19	0.03	0.22	—	1,966	1,966	0.08	0.03	0.01	1,976
2030	77.3	77.3	7.61	10.3	0.02	0.20	0.13	0.32	0.18	0.03	0.21	—	1,963	1,963	0.08	0.03	0.01	1,973
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.38	0.32	2.55	3.47	0.01	0.08	0.45	0.53	0.07	0.22	0.29	—	639	639	0.02	0.01	0.09	643
2030	3.53	3.44	3.87	5.32	0.01	0.10	0.07	0.17	0.09	0.02	0.11	—	1,000	1,000	0.04	0.01	0.11	1,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.07	0.06	0.47	0.63	< 0.005	0.01	0.08	0.10	0.01	0.04	0.05	—	106	106	< 0.005	< 0.005	0.01	106
2030	0.64	0.63	0.71	0.97	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	166	166	0.01	< 0.005	0.02	167

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.39	0.36	4.44	11.6	0.02	0.06	1.98	2.00	0.06	1.00	1.02	—	1,974	1,974	0.08	0.03	0.53	1,985
2030	77.2	77.2	4.43	11.6	0.02	0.06	0.13	0.19	0.06	0.03	0.09	—	1,970	1,970	0.08	0.03	0.49	1,981
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.39	0.36	4.46	11.6	0.02	0.06	0.13	0.19	0.06	0.03	0.09	—	1,966	1,966	0.08	0.03	0.01	1,976
2030	77.2	77.2	4.45	11.5	0.02	0.06	0.13	0.19	0.06	0.03	0.09	—	1,963	1,963	0.08	0.03	0.01	1,973
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.13	0.12	1.39	3.80	0.01	0.02	0.45	0.47	0.02	0.22	0.24	—	639	639	0.02	0.01	0.09	643
2030	3.16	3.15	2.23	5.91	0.01	0.03	0.07	0.10	0.03	0.02	0.05	—	1,000	1,000	0.04	0.01	0.11	1,006
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.02	0.02	0.25	0.69	< 0.005	< 0.005	0.08	0.09	< 0.005	0.04	0.04	—	106	106	< 0.005	< 0.005	0.01	106
2030	0.58	0.57	0.41	1.08	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	166	166	0.01	< 0.005	0.02	167

3. Construction Emissions Details

3.1. Grading (2029) - 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-Roa Equipment	0.31	0.26	2.08	2.88	< 0.005	0.09	—	0.09	0.08	—	0.08	—	423	423	0.02	< 0.005	—	424
Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
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	0.05	0.44	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.2	89.2	< 0.005	< 0.005	—	89.5
Dust From Material Movement	—	—	—	—	—	—	0.40	0.40	—	0.21	0.21	—	—	—	—	—	—	—
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	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.8	14.8	< 0.005	< 0.005	—	14.8
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.1	57.1	< 0.005	< 0.005	0.20	58.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.6	35.6	< 0.005	0.01	0.06	37.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.88
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.24	1.24	< 0.005	< 0.005	< 0.005	1.31

3.2. Grading (2029) - 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	0.07	0.07	0.83	2.94	< 0.005	0.01	—	0.01	0.01	—	0.01	—	423	423	0.02	< 0.005	—	424

Dust From Material Movement	—	—	—	—	—	—	1.92	1.92	—	0.98	0.98	—	—	—	—	—	—	—
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	0.01	0.17	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	89.2	89.2	< 0.005	< 0.005	—	89.5
Dust From Material Movement	—	—	—	—	—	—	0.40	0.40	—	0.21	0.21	—	—	—	—	—	—	—
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	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.8	14.8	< 0.005	< 0.005	—	14.8
Dust From Material Movement	—	—	—	—	—	—	0.07	0.07	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.1	57.1	< 0.005	< 0.005	0.20	58.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	35.6	35.6	< 0.005	0.01	0.06	37.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.52	7.52	< 0.005	< 0.005	0.01	7.88
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.24	1.24	< 0.005	< 0.005	< 0.005	1.31

3.3. Building Construction (2029) - 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	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
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	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
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	0.29	0.24	2.06	2.65	0.01	0.06	—	0.06	0.05	—	0.05	—	486	486	0.02	< 0.005	—	488
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	0.05	0.04	0.38	0.48	< 0.005	0.01	—	0.01	0.01	—	0.01	—	80.5	80.5	< 0.005	< 0.005	—	80.8
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	0.07	0.06	0.04	0.58	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.39	112
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.5	62.5	< 0.005	0.01	0.14	65.4
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.53	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	102	102	< 0.005	< 0.005	0.01	104
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.6	62.6	< 0.005	0.01	< 0.005	65.3
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	0.02	0.02	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.5
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.02	17.6
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.64	4.64	< 0.005	< 0.005	0.01	4.71
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.80	2.80	< 0.005	< 0.005	< 0.005	2.92
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. Building Construction (2029) - 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	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.09	0.08	1.17	2.97	0.01	0.02	—	0.02	0.02	—	0.02	—	486	486	0.02	< 0.005	—	488
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	0.01	0.21	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	80.5	80.5	< 0.005	< 0.005	—	80.8
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	0.07	0.06	0.04	0.58	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.39	112
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.5	62.5	< 0.005	0.01	0.14	65.4
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.53	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	102	102	< 0.005	< 0.005	0.01	104
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	62.6	62.6	< 0.005	0.01	< 0.005	65.3
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	0.02	0.02	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	0.05	28.5
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.02	17.6
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.64	4.64	< 0.005	< 0.005	0.01	4.71
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.80	2.80	< 0.005	< 0.005	< 0.005	2.92

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. Building Construction (2030) - 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	1.04	0.87	7.48	9.79	0.02	0.20	—	0.20	0.18	—	0.18	—	1,801	1,801	0.07	0.01	—	1,807
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	1.04	0.87	7.48	9.79	0.02	0.20	—	0.20	0.18	—	0.18	—	1,801	1,801	0.07	0.01	—	1,807
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	0.51	0.42	3.63	4.75	0.01	0.10	—	0.10	0.09	—	0.09	—	874	874	0.04	0.01	—	877
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 Equipm	0.09	0.08	0.66	0.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	145	145	0.01	< 0.005	—	145
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	0.06	0.06	0.03	0.54	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.36	110
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.6	60.6	< 0.005	0.01	0.12	63.5
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.4
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.08	50.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.4	29.4	< 0.005	< 0.005	0.03	30.8
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	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.22	8.22	< 0.005	< 0.005	0.01	8.35
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.87	4.87	< 0.005	< 0.005	< 0.005	5.10
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

3.6. Building Construction (2030) - 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	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
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	0.15	0.14	2.10	5.34	0.01	0.03	—	0.03	0.03	—	0.03	—	874	874	0.04	0.01	—	877
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	0.38	0.97	< 0.005	0.01	—	0.01	0.01	—	0.01	—	145	145	0.01	< 0.005	—	145
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	0.06	0.06	0.03	0.54	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.36	110
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.6	60.6	< 0.005	0.01	0.12	63.5
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.50	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	101	101	< 0.005	< 0.005	0.01	102
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	60.7	60.7	< 0.005	0.01	< 0.005	63.4
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.08	50.4
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.4	29.4	< 0.005	< 0.005	0.03	30.8
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	0.01	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.22	8.22	< 0.005	< 0.005	0.01	8.35
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.87	4.87	< 0.005	< 0.005	< 0.005	5.10
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

3.7. Paving (2030) - 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 Equipm	0.49	0.41	3.94	6.47	0.01	0.13	—	0.13	0.12	—	0.12	—	991	991	0.04	0.01	—	994
Paving	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Paving	< 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	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.29	6.29	< 0.005	< 0.005	—	6.32
Paving	< 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	0.05	0.03	0.47	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.7	93.7	< 0.005	< 0.005	0.31	95.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.38	3.38	< 0.005	< 0.005	0.01	3.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Paving (2030) - 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	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.05	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.1
Paving	< 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-Roa d Equipm ent	< 0.005	< 0.005	0.01	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.29	6.29	< 0.005	< 0.005	—	6.32
Paving	< 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	0.05	0.03	0.47	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.7	93.7	< 0.005	< 0.005	0.31	95.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	3.38	3.38	< 0.005	< 0.005	0.01	3.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.56	0.56	< 0.005	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2030) - 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	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	77.2	77.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	77.2	77.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14

Architect Coatings	2.96	2.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.07	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.2	20.2	< 0.005	< 0.005	< 0.005	20.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Architectural Coating (2030) - 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	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	77.2	77.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	77.2	77.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.12	5.12	< 0.005	< 0.005	—	5.14
Architectural Coatings	2.96	2.96	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.85	0.85	< 0.005	< 0.005	—	0.85
Architectural Coatings	0.54	0.54	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.8	21.8	< 0.005	< 0.005	0.07	22.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	20.2	20.2	< 0.005	< 0.005	< 0.005	20.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Grading	Grading	5/1/2029	8/15/2029	5.00	77.0	—
Building Construction	Building Construction	8/16/2029	9/5/2030	5.00	276	—
Paving	Paving	9/6/2030	9/25/2030	5.00	14.0	—
Architectural Coating	Architectural Coating	9/26/2030	10/15/2030	5.00	14.0	—

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
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	104	0.40
Grading	Excavators	Diesel	Average	1.00	6.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	6.00	104	0.40
Grading	Excavators	Diesel	Tier 4 Final	1.00	6.00	36.0	0.38
Grading	Plate Compactors	Diesel	Average	1.00	6.00	8.00	0.43
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT
Grading	Hauling	0.57	20.0	HHDT
Grading	Onsite truck	—	—	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	14.5	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	3.10	7.02	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.90	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	—	—	—	—
Grading	Worker	7.50	10.5	LDA,LDT1,LDT2
Grading	Vendor	—	7.02	HHDT,MHDT
Grading	Hauling	0.57	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.5	10.5	LDA,LDT1,LDT2
Building Construction	Vendor	3.10	7.02	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT

Paving	—	—	—	—
Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Paving	Vendor	—	7.02	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.90	10.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.02	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	67,631	22,544	2,016	594	470

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Grading	—	352	29.4	0.00	—
Paving	0.00	0.00	0.00	0.00	0.18

5.6.2. Construction Earthmoving Control Strategies

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

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%
User Defined Commercial	0.00	0%
Enclosed Parking Structure	0.18	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	453	0.03	< 0.005
2030	0.00	453	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	31.3	annual days of extreme heat
Extreme Precipitation	8.60	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.2	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	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 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	57.8
AQ-PM	42.6
AQ-DPM	42.8
Drinking Water	23.1
Lead Risk Housing	20.0
Pesticides	46.0
Toxic Releases	42.4
Traffic	25.9
Effect Indicators	—
CleanUp Sites	58.2
Groundwater	54.5

Haz Waste Facilities/Generators	82.5
Impaired Water Bodies	23.9
Solid Waste	95.3
Sensitive Population	—
Asthma	19.9
Cardio-vascular	1.98
Low Birth Weights	24.6
Socioeconomic Factor Indicators	—
Education	43.1
Housing	12.8
Linguistic	18.9
Poverty	45.7
Unemployment	0.20

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	60.22071089
Employed	97.89554729
Median HI	61.54240985
Education	—
Bachelor's or higher	52.02104453
High school enrollment	4.38855383
Preschool enrollment	23.02065957
Transportation	—
Auto Access	42.71782369
Active commuting	56.66623893

Social	—
2-parent households	75.63197742
Voting	76.8766842
Neighborhood	—
Alcohol availability	81.44488644
Park access	43.28243295
Retail density	30.16809958
Supermarket access	27.06274862
Tree canopy	96.58668035
Housing	—
Homeownership	47.00372129
Housing habitability	60.06672655
Low-inc homeowner severe housing cost burden	96.88181702
Low-inc renter severe housing cost burden	42.33286283
Uncrowded housing	55.74233286
Health Outcomes	—
Insured adults	32.84999358
Arthritis	0.0
Asthma ER Admissions	99.0
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	85.5
Cognitively Disabled	93.6
Physically Disabled	98.1

Heart Attack ER Admissions	98.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
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	19.7
SLR Inundation Area	0.0
Children	29.7
Elderly	96.3
English Speaking	52.8
Foreign-born	54.0
Outdoor Workers	17.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	86.7
Traffic Density	29.3
Traffic Access	0.0
Other Indices	—
Hardship	30.7
Other Decision Support	—
2016 Voting	59.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Provided. Landscape area is total landscape area of the project 2,064 SF multiplied by BSF of building D divided by BSF of all buildings (A, B-C, D). Zeroed out lot acreage for commercial land use of the mixed-use building.
Construction: Construction Phases	Dates are provided for Grading (start and end), start of Building Construction and end of Architectural Coating. The numbers of workdays for Building Construction, Paving, and Architectural Coating were scaled accordingly with the default ratios of workdays between these construction phases.
Construction: Off-Road Equipment	Equipment list was provided for Grading phase. Hours/day adjusted for Grading Phase as follows: the average hours/day calculated based on 8 hours/day for 4 initial days, and 6 hours/day for the rest of days during grading. Use 104 HP for small size dozer (Cat small dozer model D3). Default equipment for other phases.

Construction: Dust From Material Movement	—

2016 Voting	59.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	17.0
Healthy Places Index Score for Project Location (b)	62.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Provided. Landscape area is total landscape area of the project 2,064 SF multiplied by BSF of building A divided by BSF of all buildings (A, B-C, D).
Construction: Construction Phases	Dates are provided for Grading (start and end), start of Building Construction and end of Architectural Coating. The numbers of workdays for Building Construction, Paving, and Architectural Coating were scaled accordingly with the default ratios of workdays between these construction phases.

Construction: Off-Road Equipment	Equipment list was provided for Grading phase. Hours/day adjusted for Grading Phase as follows: the average hours/day calculated based on 8 hours/day for 4 initial days, and 6 hours/day for the rest of days during grading. Use 104 HP for small size dozer (Cat small dozer model D3). Default equipment for other phases.

Control Pathway

Dispersion Options

Titles

C:\AERMOD\Jibboom\Jibboom.isc

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM2.5

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☑	☐	☐	☐	☐	☐	☐	☐

☐ Month ☑ Period ☐ Annual

Exponential Decay

Option for variable Half-life of 4 hrs will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☑ Yes ☐ No

Default Height = 1.50 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	☑

Detailed Error Listing File

Filename: Jibboom.err

Source Pathway - Source Inputs

AERMOD

Point Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/s]	Gas Exit Temp. [K]	Gas Exit Velocity [m/s]	Stack Inside Diameter [m]
POINT	IDLE	742600.12 Idling of Amtrak train	4356882.42	1773.39	5.86	0.00040	740.00	40.00	0.38

Line Volume Sources

Source Type: LINE VOLUME

Source: AMTRAK (Amtrak passenger cars moving)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
11.00	0.01150	Surface-Based	742991.44	4357027.32	1769.68	4.08
			742413.05	4356808.59	1774.11	4.08
			742370.71	4356788.58	1775.85	4.08
			742322.21	4356758.55	1775.40	4.08
			742273.71	4356724.68	1775.58	4.08
			742220.30	4356685.53	1774.65	4.08

Source Type: LINE VOLUME

Source: UP (Union Pacific freight cars)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
11.00	0.01560	Surface-Based	742991.44	4357027.32	1769.68	4.08
			742413.05	4356808.59	1774.11	4.08
			742370.71	4356788.58	1775.85	4.08
			742322.21	4356758.55	1775.40	4.08
			742273.71	4356724.68	1775.58	4.08
			742220.30	4356685.53	1774.65	4.08

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
AMTRAK	L0001141	742986.29	4357025.38	1769.72	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001142	742976.00	4357021.48	1769.80	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001143	742965.72	4357017.59	1769.88	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001144	742955.43	4357013.70	1769.96	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001145	742945.14	4357009.81	1770.03	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001146	742934.85	4357005.92	1770.11	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001147	742924.56	4357002.03	1770.19	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001148	742914.27	4356998.14	1770.27	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001149	742903.98	4356994.25	1770.35	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001150	742893.69	4356990.36	1770.43	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001151	742883.40	4356986.47	1770.51	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001152	742873.12	4356982.57	1770.59	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001153	742862.83	4356978.68	1770.67	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001154	742852.54	4356974.79	1770.74	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001155	742842.25	4356970.90	1770.82	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001156	742831.96	4356967.01	1770.90	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001157	742821.67	4356963.12	1770.98	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001158	742811.38	4356959.23	1771.06	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001159	742801.09	4356955.34	1771.14	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001160	742790.80	4356951.45	1771.22	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001161	742780.52	4356947.56	1771.30	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001162	742770.23	4356943.66	1771.37	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001163	742759.94	4356939.77	1771.45	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001164	742749.65	4356935.88	1771.53	4.08	0.00015	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
AMTRAK	L0001165	742739.36	4356931.99	1771.61	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001166	742729.07	4356928.10	1771.69	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001167	742718.78	4356924.21	1771.77	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001168	742708.49	4356920.32	1771.85	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001169	742698.21	4356916.43	1771.93	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001170	742687.92	4356912.54	1772.00	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001171	742677.63	4356908.65	1772.08	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001172	742667.34	4356904.76	1772.16	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001173	742657.05	4356900.86	1772.24	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001174	742646.76	4356896.97	1772.32	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001175	742636.47	4356893.08	1772.40	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001176	742626.18	4356889.19	1772.48	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001177	742615.89	4356885.30	1772.56	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001178	742605.61	4356881.41	1772.64	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001179	742595.32	4356877.52	1772.71	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001180	742585.03	4356873.63	1772.79	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001181	742574.74	4356869.74	1772.87	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001182	742564.45	4356865.85	1772.95	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001183	742554.16	4356861.95	1773.03	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001184	742543.87	4356858.06	1773.11	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001185	742533.58	4356854.17	1773.19	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001186	742523.29	4356850.28	1773.27	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001187	742513.01	4356846.39	1773.34	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001188	742502.72	4356842.50	1773.42	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001189	742492.43	4356838.61	1773.50	4.08	0.00015	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
AMTRAK	L0001190	742482.14	4356834.72	1773.58	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001191	742471.85	4356830.83	1773.66	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001192	742461.56	4356826.94	1773.74	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001193	742451.27	4356823.05	1773.82	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001194	742440.98	4356819.15	1773.90	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001195	742430.70	4356815.26	1773.97	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001196	742420.41	4356811.37	1774.05	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001197	742410.22	4356807.25	1774.23	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001198	742400.27	4356802.55	1774.64	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001199	742390.33	4356797.85	1775.04	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001200	742380.38	4356793.15	1775.45	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001201	742370.45	4356788.42	1775.85	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001202	742361.10	4356782.63	1775.76	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001203	742351.75	4356776.84	1775.67	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001204	742342.39	4356771.05	1775.59	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001205	742333.04	4356765.26	1775.50	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001206	742323.69	4356759.47	1775.41	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001207	742314.62	4356753.25	1775.43	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001208	742305.60	4356746.95	1775.46	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001209	742296.58	4356740.65	1775.50	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001210	742287.56	4356734.35	1775.53	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001211	742278.54	4356728.05	1775.56	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001212	742269.59	4356721.66	1775.51	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001213	742260.72	4356715.16	1775.35	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001214	742251.85	4356708.65	1775.20	4.08	0.00015	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
AMTRAK	L0001215	742242.98	4356702.15	1775.04	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001216	742234.11	4356695.65	1774.89	4.08	0.00015	11.00	Surface-Based	5.12	3.80
	L0001217	742225.23	4356689.15	1774.74	4.08	0.00015	11.00	Surface-Based	5.12	3.80

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
UP	L0001218	742986.29	4357025.38	1769.72	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001219	742976.00	4357021.48	1769.80	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001220	742965.72	4357017.59	1769.88	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001221	742955.43	4357013.70	1769.96	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001222	742945.14	4357009.81	1770.03	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001223	742934.85	4357005.92	1770.11	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001224	742924.56	4357002.03	1770.19	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001225	742914.27	4356998.14	1770.27	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001226	742903.98	4356994.25	1770.35	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001227	742893.69	4356990.36	1770.43	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001228	742883.40	4356986.47	1770.51	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001229	742873.12	4356982.57	1770.59	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001230	742862.83	4356978.68	1770.67	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001231	742852.54	4356974.79	1770.74	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001232	742842.25	4356970.90	1770.82	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001233	742831.96	4356967.01	1770.90	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001234	742821.67	4356963.12	1770.98	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001235	742811.38	4356959.23	1771.06	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001236	742801.09	4356955.34	1771.14	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001237	742790.80	4356951.45	1771.22	4.08	0.00020	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
UP	L0001238	742780.52	4356947.56	1771.30	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001239	742770.23	4356943.66	1771.37	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001240	742759.94	4356939.77	1771.45	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001241	742749.65	4356935.88	1771.53	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001242	742739.36	4356931.99	1771.61	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001243	742729.07	4356928.10	1771.69	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001244	742718.78	4356924.21	1771.77	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001245	742708.49	4356920.32	1771.85	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001246	742698.21	4356916.43	1771.93	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001247	742687.92	4356912.54	1772.00	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001248	742677.63	4356908.65	1772.08	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001249	742667.34	4356904.76	1772.16	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001250	742657.05	4356900.86	1772.24	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001251	742646.76	4356896.97	1772.32	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001252	742636.47	4356893.08	1772.40	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001253	742626.18	4356889.19	1772.48	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001254	742615.89	4356885.30	1772.56	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001255	742605.61	4356881.41	1772.64	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001256	742595.32	4356877.52	1772.71	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001257	742585.03	4356873.63	1772.79	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001258	742574.74	4356869.74	1772.87	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001259	742564.45	4356865.85	1772.95	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001260	742554.16	4356861.95	1773.03	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001261	742543.87	4356858.06	1773.11	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001262	742533.58	4356854.17	1773.19	4.08	0.00020	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
UP	L0001263	742523.29	4356850.28	1773.27	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001264	742513.01	4356846.39	1773.34	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001265	742502.72	4356842.50	1773.42	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001266	742492.43	4356838.61	1773.50	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001267	742482.14	4356834.72	1773.58	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001268	742471.85	4356830.83	1773.66	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001269	742461.56	4356826.94	1773.74	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001270	742451.27	4356823.05	1773.82	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001271	742440.98	4356819.15	1773.90	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001272	742430.70	4356815.26	1773.97	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001273	742420.41	4356811.37	1774.05	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001274	742410.22	4356807.25	1774.23	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001275	742400.27	4356802.55	1774.64	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001276	742390.33	4356797.85	1775.04	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001277	742380.38	4356793.15	1775.45	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001278	742370.45	4356788.42	1775.85	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001279	742361.10	4356782.63	1775.76	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001280	742351.75	4356776.84	1775.67	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001281	742342.39	4356771.05	1775.59	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001282	742333.04	4356765.26	1775.50	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001283	742323.69	4356759.47	1775.41	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001284	742314.62	4356753.25	1775.43	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001285	742305.60	4356746.95	1775.46	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001286	742296.58	4356740.65	1775.50	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001287	742287.56	4356734.35	1775.53	4.08	0.00020	11.00	Surface-Based	5.12	3.80

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
UP	L0001288	742278.54	4356728.05	1775.56	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001289	742269.59	4356721.66	1775.51	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001290	742260.72	4356715.16	1775.35	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001291	742251.85	4356708.65	1775.20	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001292	742242.98	4356702.15	1775.04	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001293	742234.11	4356695.65	1774.89	4.08	0.00020	11.00	Surface-Based	5.12	3.80
	L0001294	742225.23	4356689.15	1774.74	4.08	0.00020	11.00	Surface-Based	5.12	3.80

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Source Groups

Source Group ID:	List of Sources in Group (Source Range or Single Sources)
UP	UP
IDLE	IDLE
AMTRAK	AMTRAK
ALL	All Sources Included

Variable Emissions

Hour-of-Day / Day-of-Week Emission Rate Variation

Scenario: AMT_Moving

Source ID: AMTRAK

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.16	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.16	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.16	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Scenario: AMT_Idling

Source ID: IDLE

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.03	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.03	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.03	0.00	0.00
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Scenario: UP_Moving

Source ID: UP

Weekdays							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.03
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Saturday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.03
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00
Sunday							
Hour of Day	1 - 6	0.00	0.00	0.00	0.00	0.00	0.00
	7 - 12	0.00	0.00	0.00	0.00	0.00	0.03
	13 - 18	0.00	0.00	0.00	0.00	0.00	0.00
	19 - 24	0.00	0.00	0.00	0.00	0.00	0.00

Receptor Pathway

Receptor Networks

Note: Terrain Elavations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	742541.29	4357023.01		1780.00	1.50
2	742558.80	4357004.18		1778.94	1.50
3	742643.88	4357113.63		1779.71	1.50
4	742661.61	4357095.69		1778.73	1.50

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	742537.64	4357022.81	FENCEPRI	1780.10	
2	742558.61	4357000.08	FENCEPRI	1778.74	
3	742665.59	4357094.82	FENCEPRI	1778.49	
4	742644.33	4357117.09	FENCEPRI	1779.75	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Meteorology Pathway

Met Input Data

Surface Met Data

Filename: MET\Lake Tahoe Airport\KTVL_2017-2021_ADJU.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: MET\Lake Tahoe Airport\KTVL_2017-2021_ADJU.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 1,924.50 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2017			Lake Tahoe Airport
Upper Air		2017			Lake Tahoe Airport

Data Period

Data Period to Process

Start Date: 1/1/2017 Start Hour: 1 End Date: 12/31/2021 End Hour: 24

Wind Speed Categories

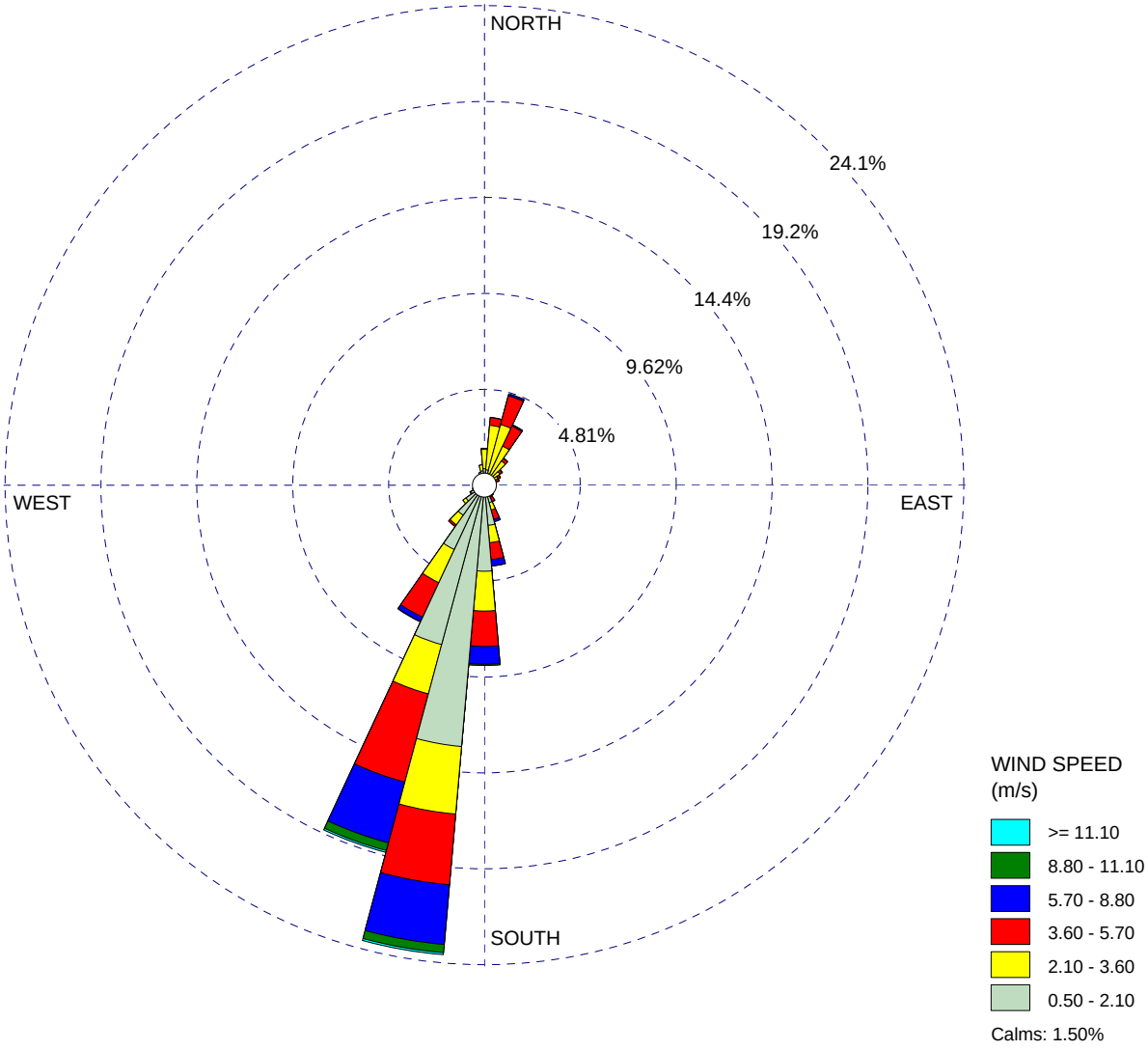
Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

WIND ROSE PLOT:

Station # 93230 Profile Wind Rose
Lake Tahoe Airport

DISPLAY:

Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 1/1/2017 - 00:00** **End Date: 12/31/2021 - 23:59**	COMPANY NAME:	
		MODELER:	
	CALM WINDS: **1.50%**	TOTAL COUNT: **43520 hrs.**	
	AVG. WIND SPEED: **2.81 m/s**	DATE: **7/26/2024**	PROJECT NO.:

Results Summary

C:\AERMOD\Jibboom\Jibboom.isc

PM2.5 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.08353	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	12/4/2018, 10
PERIOD		0.00076	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	

PM2.5 - Concentration - Source Group: AMTRAK

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.08353	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	12/4/2018, 10
PERIOD		0.00065	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	

PM2.5 - Concentration - Source Group: IDLE

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.00063	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	2/15/2021, 10
PERIOD		0.00000	ug/m^3	742541.29	4357023.01	1780.00	1.50	2041.25	

PM2.5 - Concentration - Source Group: UP

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.01341	ug/m^3	742558.61	4357000.08	1778.74	1.50	2041.25	12/4/2018, 12
PERIOD		0.00010	ug/m^3	742558.80	4357004.18	1778.94	1.50	2041.25	

DPM Cancer Risk, Chronic HI, and PM2.5 Concentration

Risk Calcualtion at Receptors

X	Y	Group	Concentration (microgram/m3)		Cancer (1/million)					Chronic HI
			DPM	PM2.5	3rd tri	0<2	2<16	16<30	sum	
742541	4357023	Resident	0.0006	0.0006	0.00694	0.14207	0.15874	0.02414	0.33189	0.00012
742559	4357004	Resident	0.00073	0.00073	0.00844	0.17285	0.19313	0.02938	0.40380	0.00015
742644	4357114	Resident	0.00044	0.00044	0.00509	0.10419	0.11641	0.01771	0.24339	0.00009
742662	4357096	Resident	0.0005	0.0005	0.00578	0.11839	0.13228	0.02012	0.27658	0.00010
742538	4357023	PLB	0.0006	0.0006	0.00694	0.14207	0.15874	0.02414	0.33189	0.00012
742559	4357000	PLB	0.00076	0.00076	0.00879	0.17996	0.20107	0.03058	0.42039	0.00015
742666	4357095	PLB	0.00051	0.00051	0.00590	0.12076	0.13493	0.02052	0.28211	0.00010
742644	4357117	PLB	0.00043	0.00043	0.00497	0.10182	0.11376	0.01730	0.23785	0.00009

Group labels: PLB = plant boundary corners; Resident=residential receptors.

Maximally Exposured Receptor

Risk Type	Value	X	Y
Cancer Risk	0.404	742558.8	4357004.2
Chronic HI	0.00015	742558.8	4357004.2
Max PM2.5	0.00073	742558.8	4357004.2

Note:
Chronic Hazard = DPM conc/DPM REL
DPM REL = 5 ug/m3
MIER: Resident at southeast corner

Exposure Parameters used in HRA

Residential

Parameter	Abbr.	3rd Tri	0<2	2<16	16<30
Daily Breathing Rate (L/kg/day)	DBR	361	1,090	572	261
Inhalation Absorption Factor (uni	A	1.0	1.0	1.0	1.0
Exposure Frequency (unitless)	EF	0.96	0.96	0.96	0.96
Conversion Factor (ug to mg, L t	CF	1.00E-06	1.00E-06	1.00E-06	1.00E-06
Age Sensitivity Factor (unitless)	ASF	10	10	3	1
Exposure Duration (years)	ED	0.25	2	14	14
Averaging Time (years)	AT	70	70	70	70
Fraction of Time at Home (unitle	FAH	0.85	0.72	0.73	0.73
Cancer Conversion Factor (unitle	CCF	1.00E+06	1.00E+06	1.00E+06	1.00E+06
Cancer Potency Factor (mg/kg/da	CPF	1.1	1.1	1.1	1.1

DBR from OEHHA Table 5.7, 95th percentile for 3rd Tri <2, 80th percentile all other age groups
EF Based on 350 days per year
ASF from on OEHHA Table 8.3
AT based on 70 years
FAH from OEHHA Table 8.4
CCF is Conversion factor to convert cancer risk to chances per million
DPM CPF from OEHHA Table 7.1

RESIDENT DOSE: CONC x DBR x A x EF x CF OEHHA Eq 5.4.1.1
RESIDENT CANCER RISK: DOSE x CPF x ASF x [ED/AT] x FAH x CCF Eq 8.2.4
RESIDENT CANCER RISK: CONC x A x EF x CPF x CF x CCF x DBR x ASF x [ED/AT] x FAH

RailRat.net

Home Routes **Stations** Trains ☰

Truckee, CA [TRU]

Train arrival and departure updates for Truckee, CA (unofficial) follows. Click on the three dots for more detail. Trains move down the lists.

Arriving Trains

- 10:33 California Zephyr 5, on tm
  Chicago [CHI] → Emeryville [EMY]
  Ar est. 10:33 08/30
  Dp sch. 10:33, est. 10:35 08/30
- 14:01 California Zephyr 6, on tm
  Emeryville [EMY] → Chicago [CHI]
  Ar est. 14:01 08/29
  Dp sch. 14:01, est. 14:03 08/29
- 10:33 California Zephyr 5, on tm
  Chicago [CHI] → Emeryville [EMY]
  Ar est. 10:33 08/29
  Dp sch. 10:33, est. 10:35 08/29

Departed Trains

- 14:03 California Zephyr 6
  Emeryville [EMY] → Chicago [CHI]
  Ar act. 14:01 08/28
  Dp sch. 14:01, act. 14:03 08/28
- 15:30 California Zephyr 6
  Emeryville [EMY] → Chicago [CHI]

Ar act. 15:25 08/27
Dp sch. 14:01, act. 15:30 08/27

Useful Links

- QR Code to share
- RailRat Playlist NEW
- Amtrak TRU Station Page.
- Recent Amtrak Status Maps Archive (ASMAD) station history.
- Live Map for Truckee, CA [TRU] from North America Intercity Rail Tools.

Last updated Thursday, 29-Aug-2024 08:51:11 PDT
