APPENDIX A

Air Quality Model Calculations

SMUD Jackson Substation

Criteria Air Pollutant Emissions

Construction Emissions

Description	ROG lb/day	NOX lb/day	PM10 lb/day	PM2.5 lb/day	PM10 ton/year	PM2.5 ton/year
Construction Equipment and Vehicles	7	54	9	5	0.38	0.15
SMAQMD Threshold	N/A	85	80	82	14.6	15
Threshold Exceeded?	No	No	No	No	No	No

Operational Emissions

Description	ROG lb/day	NOX lb/day	PM10 lb/day	PM2.5 lb/day	PM10 ton/year	PM2.5 ton/year
Operations (Mobile)	0.4	0.1	0.04	0.01	0.0006	0.0002
SMAQMD Threshold	N/A	85	80	82	14.6	15
Threshold Exceeded?	No	No	No	No	No	No

Greenhouse Gas Emissions

Construction

Year	MT CO2e
2030	937.3
2031	214.5
2032	67.7

Operation

Emissions Source	MT CO2e per year
Mobile	0.81
Area (includes SF6 leakage)	242.16
Total	**242.97**

CalEEMod Assumptions and Inputs - Maximum Daily Emissions

Project Name	Jackson Bulk Substation
Project Location	Excelsior Road and Jackson Road (Unincorporated Sac County)
CEC EDFZ	13
Land Use Setting	Suburban
Construction Start Date	1-Jan-30
Operational Year	2032
Utility	SMUD

acre	sq ft
1	43560

Land Use

Project Component	CalEEMod Land Use Type	Unit	Size	Acres	Building Square Footage	Notes
Control Building	Industrial (General Light Industry)	1000 sf	4	0.09	8,000	
Asphalt surfaces	Parking (Other Asphalt Surfaces)	1000 sf	125	2.86	0	
Non-Asphalt surfaces	Parking (Other Nonasphalt surfaces)	1000 sf	655	15.05	0	RFI noted to double what was assumed for Station J, which resulted in overestimate (ie total acreage > 18 acres). Assumed net of total site acreage and control building + asphalt areas
Detention Basin	User Defined Recreational	1000 sf	44	1.00	0	Measured in Google Earth based on site layout
Transmission Lines	User Defined Industrial	miles	5.65	4.11	0	Assume 6ft width similar to Station J.

Note:

Construction Schedule

Phase Name	CalEEMod Phase Type	Weeks	Start	End	CalEEMod Workdays	Workers
Clearing and Grubbing	Site Preparation	4	1/1/2030	1/28/2030	20	CalEEMod Defaults
Grading, Drainage and Access Road	Grading	20	1/29/2030	6/18/2030	101.00	30
Fencing/Wall Installation	Building Construction	12	4/1/2030	10/1/2030	132.00	30
Below-Grade Civil Construction	Building Construction	26	4/1/2030	10/1/2030	132.00	30
Control Building Construction	Building Construction	52	6/18/2030	6/17/2031	261.00	CalEEMod Defaults
Integration of the Control Building with Switchyard	Building Construction	40	4/1/2031	1/6/2032	201.00	CalEEMod Defaults
Paving of Interior Access Roads	Paving	3	6/17/2031	7/8/2031	16.00	CalEEMod Defaults
Steel Erection	Building Construction	12	7/8/2031	9/30/2031	61.00	30
Linear Construction	Building Construction	40	9/30/2031	7/6/2032	201.00	30

Construction Equipment - Maximum Daily

Phase Name	CalEEMod Phase Type	Equipment	CalEEMod Equipment	Quantity	Hrs/Day	Notes
Clearing and Grubbing	Site Preparation	Rubber Tired Dozer	Rubber Tired Dozer	3	8	Assume CalEEMod defaults
		Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	4	8	
		Water Truck	*Vendor Truck*	*1*	*NA*	Assume water truck for fugitive dust control
Grading, Drainage and Access Road	Grading	Grader	Grader	2	8	Assume same equipment as Station J
		Scraper	Scraper	2	8	
		Excavator	Excavators	2	8	172 HP (Cat 320)
		Dozer	Crawler Tractor	2	8	363 HP (Cat D8)
		Sheeps Foot Compactor	Plate Compactor	2	8	
		1 Ton Service Truck	Off-Highway Truck	2	4	
		Front Loader	Tractors/Loaders/Backhoes	1	6	
		Street sweeper	Sweepers/Scrubbers	1	4	
		Water Truck	*Vendor Truck*	*1*	*NA*	
		20 Ton Tandem Haul Truck (import material)	*Haul Truck*	*NA*	*NA*	
		Casing Delivery - Flat Bed Truck	*Vendor Truck*	*1*	*NA*	
		Semi-End Dump	*Dumpers/Tenders*	*1*	*NA - captured as haul trucks for this phase.*	
Fencing/Wall Installation	Building Construction	Skid Steer w/Drill	Skid Steer Loaders	3	8	
		Backhoe	Tractors/Loaders/Backhoes	1	8	107 HP (Cat 430)
		30 ton Crane	Cranes	1	7	
		Semi-flatbed truck	*Vendor Truck*	*2*	*NA*	
		Concrete truck	*Vendor Truck*	*3*	*NA*	
Below-Grade Civil Construction	Building Construction	Truck-mounted drill rig	Bore/Drill Rigs	2	8	Assume same equipment as Station J
		1 Ton Service Truck	Off-Highway Truck	3	4	
		Front loader	Tractors/Loaders/Backhoes	2	8	
		Excavator	Excavators	1	8	172 HP (Cat 320)
		Generator	Generator Set	2	8	20 hp
		Street sweeper	Sweepers/Scrubbers	1	4	
		3-5 Ton Roller/Compactor	Roller	2	8	
		Material Delivery	*Vendor Truck*	*2*	*NA*	
		Concrete Delivery	*Vendor Truck*	*1*	*NA*	
		Conduit Delivery - Flat Bed	*Vendor Truck*	*6*	*NA*	
		Concrete truck	*Vendor Truck*	*1*	*NA*	
Control Building Construction	Building Construction	Cranes	Cranes	1	7	Equipment based on CalEEMod defaults for 8,000 sf light industrial building
		Forklift	Forklift	3	6	
		Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	7	
		Generator Sets	Generator Sets	1	8	20 HP (assume same as other phases)
		Welders	Welders	1	8	
Integration of the Control Building with Switchyard	Building Construction	Manlift	Aerial Lifts	2	8	Equipment indicated in RFI, Workers based on CalEEMod defaults (1.25 worker trips per piece of equipment)
		Generator	Generator Set	2	8	20 HP (assume same as other phases)
Paving of Interior Access Roads	Paving	Pavers	Pavers	2	8	Equipment based on CalEEMod defaults
		Paving Equipment	Paving Equipment	2	8	
		Rollers	Rollers	2	8	
Steel Erection	Building Construction	290 Ton Crane	Crane	1	8	Assume same equipment as Station J
		Manlift	Aerial Lifts	2	8	
		10000 lb Reach Forklift	Forklift	1	8	
		1 Ton Service Truck	Off-Highway Truck	2	2	
		Generator	Generator Set	1	8	
		Welder	Welder	1	8	20 hp
		Street sweeper	Sweepers/Scrubbers	1	8	
		Equipment Delivery - Semi-flatbed truck	*Vendor Truck*	*10*	*NA*	
Linear Construction	Building Construction	290 Ton Crane	Crane	1	8	Assume same equipment as Station J
		Telescoping handler	Other Construction Equipment	1	6	101 HP (Cat TH406)
		Generator	Generator Set	2	8	Phase includes the offsite linear pole installation and excavation
		Street Sweeper	Sweepers/Scrubbers	1	4	20 hp
		Semi-flatbed truck	*Vendor Truck*	*1*	*NA*	

Grading Quantities

Material	Phases	Cubic Yards Import	Export
Engineered Fill	Grading, Drainage and Access Road	59,000	-

Construction Worker & Vendor Trips

Phase	Worker One-Way Trips Per Day	Vendor One-Way Truck Trips/Day	Haul One-Way Truck Trips per Day
Clearing and Grubbing	CalEEMod Defaults	2	Default (0)
Grading, Drainage and Access Road	60	2	Default (73)
Fencing/Wall Installation	0 - included above	10	Default (0)
Below-Grade Civil Construction	60	20	Default (0)
Control Building Construction	60	Default (1.3)	Default (0)
Integration of the Control Building with Switchyard	CalEEMod Defaults	Default (0)	Default (0)
Paving of Interior Access Roads	CalEEMod Defaults	Default (0)	Default (0)
Steel Erection	60	20	Default
Linear Construction	60	2	Default (0)

CalEEMod Assumptions and Inputs - Annual Emissions

Project Name	Jackson Bulk Substation
Project Location	Excelsior Road and Jackson Road (Unincorporated Sac County)
CEC EDFZ	13
Land Use Setting	Suburban
Construction Start Date	1-Jan-30
Utility	SMUD

acre	sq ft
1	43560

Land Use

Project Component	CalEEMod Land Use Type	Unit	Size	Acres	Building Square			Notes
Control Building	Industrial (General Light Industry)	1000 sf	4	0.09	8,000			
Asphalt surfaces	Parking (Other Asphalt Surfaces)	1000 sf	125	2.86	0			
Non-Asphalt surfaces	Parking (Other Nonasphalt surfaces)	1000 sf	655	15.05	0			RFI noted to double what was assumed for Station J, which resulted in overestimate (ie total acreage > 18 acres). Assumed net of total site acreage and control building + asphalt areas
Detention Basin	User Defined Recreational	1000 sf	44	1.00	0			Measured in Google Earth based on site layout
Transmission Lines	User Defined Industrial	miles	5.65	4.11	0			Assume 6ft width similar to Station J.

Note:

Construction Schedule

Phase Name	CalEEMod Phase Type	Weeks	Start	End	CalEEMod Workdays	Workers
Clearing and Grubbing	Site Preparation	4	1/1/2030	1/28/2030	20	CalEEMod Defaults
Grading, Drainage and Access Road	Grading	20	1/29/2030	6/18/2030	101.00	30
Fencing/Wall Installation	Building Construction	12	4/1/2030	10/1/2030	132.00	30
Below-Grade Civil Construction	Building Construction	26	4/1/2030	10/1/2030	132.00	30
Control Building Construction	Building Construction	52	6/18/2030	6/17/2031	261.00	CalEEMod Defaults
Integration of the Control Building with Switchyard	Building Construction	40	4/1/2031	1/6/2032	201.00	CalEEMod Defaults
Paving of Interior Access Roads	Paving	3	6/17/2031	7/8/2031	16.00	CalEEMod Defaults
Steel Erection	Building Construction	12	7/8/2031	9/30/2031	61.00	30
Linear Construction	Building Construction	40	9/30/2031	7/6/2032	201.00	30

Construction Equipment - Annual

Phase Name	CalEEMod Phase Type	Equipment	CalEEMod Equipment	Quantity	Hrs/Day	Days of Use	Average Hours per Day	Notes
Clearing and Grubbing	Site Preparation	Rubber Tired Dozer	Rubber Tired Dozer	3	8	20	8	Assume CalEEMod defaults
		Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	4	8	20	8	
		Water Truck	*Vendor Truck*	*1*	*NA*	*N/A*	*N/A*	Assume water truck for fugitive dust control
Grading, Drainage and Access Road	Grading	Grader	Grader	2	8	50	4.0	Assume same equipment as Station J
		Scraper	Scraper	2	8	50	4.0	
		Excavator	Excavators	2	8	50	4.0	172 HP (Cat 320)
		Dozer	Crawler Tractor	2	8	50	4.0	363 HP (Cat D8)
		Sheeps Foot Compactor	Plate Compactor	2	8	50	4.0	
		1 Ton Service Truck	Off-Highway Truck	2	4	101	4.0	
		Front Loader	Tractors/Loaders/Backhoes	1	6	20	1.2	
		Street sweeper	Sweepers/Scrubbers	1	4	20	0.8	
		Water Truck	*Vendor Truck*	*1*	*NA*	*N/A*	*N/A*	
		20 Ton Tandem Haul Truck (import material)	*Haul Truck*	*NA*	*NA*	*N/A*	*N/A*	
		Casing Delivery - Flat Bed Truck	*Vendor Truck*	*1*	*NA*	*N/A*	*N/A*	
		Semi-End Dump	*Dumpers/Tenders*	*1*	*NA - captured as haul trucks for this phase.*	*N/A*	*N/A*	
Fencing/Wall Installation	Building Construction	Skid Steer w/Drill	Skid Steer Loaders	3	8	30	1.8	
		Backhoe	Tractors/Loaders/Backhoes	1	8	20	1.2	107 HP (Cat 430)
		30 ton Crane	Cranes	1	7	20	1.1	
		Semi-flatbed truck	*Vendor Truck*	*2*	*NA*	*N/A*	*N/A*	
		Concrete truck	*Vendor Truck*	*3*	*NA*	*N/A*	*N/A*	
Below-Grade Civil Construction	Building Construction	Truck-mounted drill rig	Bore/Drill Rigs	2	8	60	3.6	Assume same equipment as Station J
		1 Ton Service Truck	Off-Highway Truck	3	4	132	4.0	
		Front loader	Tractors/Loaders/Backhoes	2	8	20	1.2	
		Excavator	Excavators	1	8	40	2.4	172 HP (Cat 320)
		Generator	Generator Set	2	8	40	2.4	20 hp
		Street sweeper	Sweepers/Scrubbers	1	4	44	1.3	
		3-5 Ton Roller/Compactor	Roller	2	8	40	2.4	
		Material Delivery	*Vendor Truck*	*2*	*NA*	*NA*	*NA*	
		Concrete Delivery	*Vendor Truck*	*1*	*NA*	*NA*	*NA*	
		Conduit Delivery - Flat Bed	*Vendor Truck*	*6*	*NA*	*NA*	*NA*	
		Concrete truck	*Vendor Truck*	*1*	*NA*	*NA*	*NA*	
Control Building Construction	Building Construction	Cranes	Cranes	1	7	20	0.5	Equipment based on CalEEMod defaults for 8,000 sf light industrial building
		Forklift	Forklift	3	6	200	4.6	
		Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	7	100	2.7	
		Generator Sets	Generator Sets	1	8	200	6.1	20 HP (assume same as other phases)
		Welders	Welders	1	8	160	4.9	
Integration of the Control Building with Switchyard	Building Construction	Manlift	Aerial Lifts	2	8	100	4.0	Equipment indicated in RFI, Workers based on CalEEMod defaults (1.25 worker trips per piece of equipment)
		Generator	Generator Set	2	8	50	2.0	20 HP (assume same as other phases)
Paving of Interior Access Roads	Paving	Pavers	Pavers	2	8	16	8	Assumes CalEEMod defaults
		Paving Equipment	Paving Equipment	2	8	16	8	
		Rollers	Rollers	2	8	16	8	
Steel Erection	Building Construction	290 Ton Crane	Crane	1	8	10	1.3	Assume same equipment as Station J
		Manlift	Aerial Lifts	2	8	50	6.6	
		10000 lb Reach Forklift	Forklift	1	8	50	6.6	
		1 Ton Service Truck	Off-Highway Truck	2	2	61	2.0	
		Generator	Generator Set	1	8	40	5.2	
		Welder	Welder	1	8	10	1.3	20 hp
		Street sweeper	Sweepers/Scrubbers	1	8	10	1.3	
		Equipment Delivery - Semi-flatbed truck	*Vendor Truck*	*10*	*NA*	*N/A*	*N/A*	
Linear Construction	Building Construction	290 Ton Crane	Crane	1	8	10	0.4	Assume same equipment as Station J
		Telescoping handler	Other Construction Equipment	1	6	100	3.0	101 HP (Cat TH406)
		Generator	Generator Set	2	8	201	8.0	Phase includes the offsite linear pole installation and excavation
		Street Sweeper	Sweepers/Scrubbers	1	4	20	0.4	20 hp
		Semi-flatbed truck	*Vendor Truck*	*1*	*NA*	*N/A*	*N/A*	

Notes:
1. Construction Schedule based on Project Description; equipment based on Station J construction and refined for project-specific details.
2. The number of days of use is the duration of use for each piece of equipment within the respective subphases. The CalEEMod Workdays is the number of working days for the overall subphase.
The number of days of use per each piece of equipment is divided by the overall phase duration (CalEEMod workdays) to determine the proportionate duration of use compared to the overall phase duration.

Grading Quantities

Material	Phases	Cubic Yards Import	Export
Engineered Fill	Grading, Drainage and Access Road	59,000	-

Construction Worker & Vendor Trips

Phase	Workers	Vendor One-Way Truck Trips/Day	Haul One-Way Truck Trips per Day
Clearing and Grubbing	CalEEMod Defaults	2	Default (0)
Grading, Drainage and Access Road	60	2	Default (73)
Fencing/Wall Installation	0 - included above	10	Default (0)
Below-Grade Civil Construction	60	20	Default (0)
Control Building Construction	60	Default (1.3)	Default (0)
Integration of the Control Building with Switchyard	CalEEMod Defaults	Default (0)	Default (0)
Paving of Interior Access Roads	CalEEMod Defaults	Default (0)	Default (0)
Steel Erection	60	20	Default
Linear Construction	60	2	Default (0)

Operations Trips

Operational Activity	Peak Weekday Trips (one-way)	Annual Trips (one-way)	VMT/trip	Weekday VMT	Annual VMT
Internal Inspections	2	96	11.08	22.16	1063.68
Perimeter Maintenance	2	8	11.08	22.16	88.64
Total	**4**	**104**	**-**	**44.32**	**1152.32**

Notes:

1. Peak weekday trips assume 1 staff vehicle each for internal inspections and perimeter maintenance overlap on same weekday.
2. Internal inspection annual trips assume 4x per month. Perimeter maintenance annual trips assume 4x per year.
3. Trip length based on residential home-work trip length for Sacramento County from CalEEMod Appendix G, Table G-15.
4. Operational fleet mix assumes 50% LHD1 and 50% LHD2 (light-heavy-duty trucks).

SF6 Use

Source	Pounds (lbs)	Total SF6 Use (Metric Tons)	% Leakage, Per CARB Regulation	Total Annual SF6 Emissions (Metric Tons)	Total Annual CO2e Emissions from SF6 Use (MT CO2e)
New Substation	2340	1.06	0.01	0.01	242.00
Transformers	0	0.00	0	0.00	0.00

Note:

1. Substation SF6 use assume thirteen (13) 230kV power circuit breakers each with up to 180 pounds of SF6.
2. Transformers use insulating oil, not SF6.

Constants	
lb	grams
1	453.592
ton	lb
1	2000
metric ton	lb
1	2204.62
GWP CO2	SF6
1	22800

Construction Energy Summary

Source	MT CO_2 [a]	Fuel Type	Emission Factor ($lb\ CO_2$/gallon) [b]	Gallons
Off-Road	727.21	Diesel	22.45	72,559
Hauling	216.58	Diesel	22.45	21,610
Vendor	61.72	Diesel	22.45	6,158
Worker	196.93	Gas	18.73	23,552
		Total Demand	**Diesel**	**100,327**
			Gasoline	**23,552**

Sources:

[a] Modeled by AECOM in 2026.

[b] U.S. Energy Information Administration released September 18, 2024 (https://www.eia.gov/environment/emissions/co2_vol_mass.php)

SMUD Jackson Substation Max Daily Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SMUD Jackson Substation Max Daily
Construction Start Date	4/2/2030
Operational Year	2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70000
Precipitation (days)	37.8000
Location	38.5164035153617, -121.29661252992364
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	708
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

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
General Light Industry	4.00000	1000sqft	0.09183	8,000.00	0.00000	—	—	Control Building

Other Asphalt Surfaces	125.000	1000sqft	2.86961	0.00000	0.00000	—	—	Asphalt areas
Other Non-Asphalt Surfaces	655.000	1000sqft	15.0367	0.00000	0.00000	—	—	Concrete areas
User Defined Recreational	1.000000	User Defined Unit	1.000000	0.00000	0.00000	—	—	Detention basin
User Defined Industrial	1.000000	User Defined Unit	4.11000	0.00000	0.00000	—	—	Transmission lines

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.70050	6.99648	53.9978	82.7876	0.20516	1.80020	5.04886	6.84907	1.65754	1.02511	2.68265	—	24,879.9	24,879.9	1.13042	1.03209	13.0746	25,220.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.67772	4.46799	38.5608	52.9134	0.15410	1.31790	7.85820	8.92526	1.21418	3.98548	4.96685	—	18,305.0	18,305.0	0.89690	0.93228	0.24591	18,605.5
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.03903	2.46044	19.4667	29.0572	0.06944	0.65012	1.94797	2.59809	0.59789	0.53080	1.12869	—	8,314.40	8,314.40	0.37249	0.30329	1.76858	8,415.86
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.55462	0.44903	3.55267	5.30293	0.01267	0.11865	0.35550	0.47415	0.10912	0.09687	0.20599	—	1,376.54	1,376.54	0.06167	0.05021	0.29281	1,393.34

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	8.70050	6.99648	53.9978	82.7876	0.20516	1.80020	5.04886	6.84907	1.65754	1.02511	2.68265	—	24,879.9	24,879.9	1.13042	1.03209	13.0746	25,220.8
2031	3.20192	2.76601	19.5074	28.5262	0.05373	0.61309	1.40876	2.02185	0.56438	0.33701	0.90140	—	6,682.54	6,682.54	0.24447	0.12856	3.64642	6,730.61
2032	1.08415	0.92950	6.02680	9.28091	0.01720	0.24028	0.62097	0.86125	0.22108	0.14617	0.36726	—	2,315.96	2,315.96	0.07681	0.02445	1.28367	2,326.45
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	5.67772	4.46799	38.5608	52.9134	0.15410	1.31790	7.85820	8.92526	1.21418	3.98548	4.96685	—	18,305.0	18,305.0	0.89690	0.93228	0.24591	18,605.5
2031	1.53591	1.30279	9.99069	14.1707	0.02407	0.35190	0.65492	1.00682	0.32378	0.15413	0.47791	—	2,900.92	2,900.92	0.10691	0.04984	0.03985	2,917.51
2032	1.50305	1.27321	9.73992	11.7551	0.02407	0.33474	0.65492	0.98966	0.30799	0.15413	0.46212	—	2,871.01	2,871.01	0.10398	0.02948	0.03501	2,882.43
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	3.03903	2.46044	19.4667	29.0572	0.06944	0.65012	1.94797	2.59809	0.59789	0.53080	1.12869	—	8,314.40	8,314.40	0.37249	0.30329	1.76858	8,415.86
2031	1.15499	0.97979	7.70541	10.5817	0.02003	0.23102	0.45519	0.68622	0.21261	0.10780	0.32041	—	2,394.03	2,394.03	0.08956	0.03339	0.49591	2,406.72
2032	0.39859	0.34035	2.26949	3.23257	0.00641	0.08951	0.22332	0.31283	0.08236	0.05249	0.13485	—	839.925	839.925	0.02903	0.00906	0.20410	843.553
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.55462	0.44903	3.55267	5.30293	0.01267	0.11865	0.35550	0.47415	0.10912	0.09687	0.20599	—	1,376.54	1,376.54	0.06167	0.05021	0.29281	1,393.34
2031	0.21079	0.17881	1.40624	1.93115	0.00366	0.04216	0.08307	0.12523	0.03880	0.01967	0.05847	—	396.359	396.359	0.01483	0.00553	0.08210	398.459
2032	0.07274	0.06211	0.41418	0.58994	0.00117	0.01634	0.04076	0.05709	0.01503	0.00958	0.02461	—	139.059	139.059	0.00481	0.00150	0.03379	139.660

2.4. Operations Emissions Compared Against Thresholds

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38021	0.37413	0.05346	0.40880	0.00067	0.00217	0.03812	0.04030	0.00195	0.01031	0.01226	0.00000	67.9617	67.9617	0.00065	0.00553	0.30975	69.9367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.31793	0.31664	0.05550	0.06119	0.00064	0.00156	0.03812	0.03968	0.00149	0.01031	0.01180	0.00000	66.5315	66.5315	0.00059	0.00558	0.00804	68.2171
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.35044	0.34708	0.00586	0.24265	0.00006	0.00053	0.00266	0.00320	0.00043	0.00072	0.00115	0.00000	5.71918	5.71918	0.00008	0.00040	0.00953	5.85122
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06396	0.06334	0.00107	0.04428	0.00001	0.00010	0.00049	0.00058	0.00008	0.00013	0.00021	0.00000	0.94687	0.94687	0.00001	0.00007	0.00158	0.96874

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01101	0.00971	0.05053	0.06086	0.00064	0.00156	0.03812	0.03968	0.00149	0.01031	0.01180	—	66.5309	66.5309	0.00059	0.00552	0.30975	68.5008
Area	0.36920	0.36442	0.00293	0.34794	0.00002	0.00062	—	0.00062	0.00047	—	0.00047	—	1.43077	1.43077	0.00006	0.00001	—	1.43593
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.38021	0.37413	0.05346	0.40880	0.00067	0.00217	0.03812	0.04030	0.00195	0.01031	0.01226	0.00000	67.9617	67.9617	0.00065	0.00553	0.30975	69.9367
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01070	0.00940	0.05550	0.06119	0.00064	0.00156	0.03812	0.03968	0.00149	0.01031	0.01180	—	66.5315	66.5315	0.00059	0.00558	0.00804	68.2171

Area	0.30724	0.30724	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.31793	0.31664	0.05550	0.06119	0.00064	0.00156	0.03812	0.03968	0.00149	0.01031	0.01180	0.00000	66.5315	66.5315	0.00059	0.00558	0.00804	68.2171
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00077	0.00067	0.00385	0.00434	0.00005	0.00011	0.00266	0.00277	0.00011	0.00072	0.00083	—	4.73919	4.73919	0.00004	0.00040	0.00953	4.86771
Area	0.34967	0.34640	0.00201	0.23832	0.00001	0.00042	—	0.00042	0.00032	—	0.00032	—	0.97998	0.97998	0.00004	0.00001	—	0.98352
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.35044	0.34708	0.00586	0.24265	0.00006	0.00053	0.00266	0.00320	0.00043	0.00072	0.00115	0.00000	5.71918	5.71918	0.00008	0.00040	0.00953	5.85122
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00014	0.00012	0.00070	0.00079	0.00001	0.00002	0.00049	0.00051	0.00002	0.00013	0.00015	—	0.78463	0.78463	0.00001	0.00007	0.00158	0.80590
Area	0.06382	0.06322	0.00037	0.04349	< 0.000005	0.00008	—	0.00008	0.00006	—	0.00006	—	0.16225	0.16225	0.00001	< 0.000005	—	0.16283
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.06396	0.06334	0.00107	0.04428	0.00001	0.00010	0.00049	0.00058	0.00008	0.00013	0.00021	0.00000	0.94687	0.94687	0.00001	0.00007	0.00158	0.96874

3. Construction Emissions Details

3.1. Clearing and Grubbing (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47350	2.91871	25.2092	28.4319	0.04889	1.06629	—	1.06629	0.98098	—	0.98098	—	5,295.67	5,295.67	0.21482	0.04296	—	5,313.84
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19033	0.15993	1.38132	1.55791	0.00268	0.05843	—	0.05843	0.05375	—	0.05375	—	290.174	290.174	0.01177	0.00235	—	291.169
Dust From Material Movement	—	—	—	—	—	—	0.42007	0.42007	—	0.21589	0.21589	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03474	0.02919	0.25209	0.28432	0.00049	0.01066	—	0.01066	0.00981	—	0.00981	—	48.0415	48.0415	0.00195	0.00039	—	48.2064
Dust From Material Movement	—	—	—	—	—	—	0.07666	0.07666	—	0.03940	0.03940	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05066	0.04911	0.04468	0.57196	0.00000	0.00000	0.17681	0.17681	0.00000	0.04144	0.04144	—	160.674	160.674	0.00309	0.00667	0.01183	162.752
Vendor	0.00456	0.00157	0.08047	0.03312	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5855	50.5855	0.00295	0.00772	0.00215	52.9633
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00308	0.00271	0.00208	0.03200	0.00000	0.00000	0.00945	0.00945	0.00000	0.00221	0.00221	—	9.03357	9.03357	0.00015	0.00006	0.01081	9.06698
Vendor	0.00025	0.00009	0.00432	0.00179	0.00002	0.00004	0.00081	0.00086	0.00002	0.00022	0.00024	—	2.77161	2.77161	0.00016	0.00042	0.00196	2.90374
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00056	0.00049	0.00038	0.00584	0.00000	0.00000	0.00173	0.00173	0.00000	0.00040	0.00040	—	1.49561	1.49561	0.00002	0.00001	0.00179	1.50114
Vendor	0.00005	0.00002	0.00079	0.00033	< 0.000005	0.00001	0.00015	0.00016	< 0.000005	0.00004	0.00004	—	0.45887	0.45887	0.00003	0.00007	0.00032	0.48075
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading, Drainage and Access Road (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	4.32071	3.62948	24.8146	38.1673	0.09977	1.06779	—	1.06779	0.98236	—	0.98236	—	10,753.9	10,753.9	0.43623	0.08725	—	10,790.8
Dust From Material Movement	—	—	—	—	—	—	1.66766	1.66766	—	0.18064	0.18064	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.32071	3.62948	24.8146	38.1673	0.09977	1.06779	—	1.06779	0.98236	—	0.98236	—	10,753.9	10,753.9	0.43623	0.08725	—	10,790.8
Dust From Material Movement	—	—	—	—	—	—	1.66766	1.66766	—	0.18064	0.18064	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19559	1.00432	6.86651	10.5614	0.02761	0.29547	—	0.29547	0.27183	—	0.27183	—	2,975.74	2,975.74	0.12071	0.02414	—	2,985.95
Dust From Material Movement	—	—	—	—	—	—	0.46146	0.46146	—	0.04999	0.04999	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.21820	0.18329	1.25314	1.92745	0.00504	0.05392	—	0.05392	0.04961	—	0.04961	—	492.668	492.668	0.01998	0.00400	—	494.358
Dust From Material Movement	—	—	—	—	—	—	0.08422	0.08422	—	0.00912	0.00912	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.00469	0.00166	0.07515	0.03220	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5792	50.5792	0.00295	0.00772	0.08267	53.0376
Hauling	0.49904	0.10947	7.32142	3.23733	0.03381	0.06439	1.38598	1.45038	0.06439	0.37064	0.43504	—	4,727.32	4,727.32	0.35416	0.75983	7.41254	4,970.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.00456	0.00157	0.08047	0.03312	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5855	50.5855	0.00295	0.00772	0.00215	52.9633
Hauling	0.49421	0.10464	7.90256	3.26631	0.03381	0.06600	1.38598	1.45198	0.06439	0.37064	0.43504	—	4,727.60	4,727.60	0.35255	0.75983	0.19245	4,963.04
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05329	0.04696	0.03605	0.55413	0.00000	0.00000	0.16367	0.16367	0.00000	0.03830	0.03830	—	156.410	156.410	0.00256	0.00110	0.18712	156.988
Vendor	0.00127	0.00045	0.02183	0.00902	0.00011	0.00021	0.00411	0.00432	0.00011	0.00111	0.00122	—	13.9966	13.9966	0.00082	0.00214	0.00989	14.6639
Hauling	0.13765	0.02940	2.14575	0.89893	0.00935	0.01782	0.37659	0.39441	0.01782	0.10083	0.11865	—	1,308.14	1,308.14	0.09800	0.21025	0.88543	1,374.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00973	0.00857	0.00658	0.10113	0.00000	0.00000	0.02987	0.02987	0.00000	0.00699	0.00699	—	25.8954	25.8954	0.00042	0.00018	0.03098	25.9912
Vendor	0.00023	0.00008	0.00398	0.00165	0.00002	0.00004	0.00075	0.00079	0.00002	0.00020	0.00022	—	2.31730	2.31730	0.00013	0.00035	0.00164	2.42777
Hauling	0.02512	0.00537	0.39160	0.16405	0.00171	0.00325	0.06873	0.07198	0.00325	0.01840	0.02165	—	216.578	216.578	0.01623	0.03481	0.14659	227.503

3.5. Fencing/Wall (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	0.66176	0.55607	5.20761	9.31996	0.01819	0.17946	—	0.17946	0.16510	—	0.16510	—	1,969.08	1,969.08	0.07987	0.01597	—	1,975.84
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66176	0.55607	5.20761	9.31996	0.01819	0.17946	—	0.17946	0.16510	—	0.16510	—	1,969.08	1,969.08	0.07987	0.01597	—	1,975.84
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11060	0.09293	0.87031	1.55758	0.00304	0.02999	—	0.02999	0.02759	—	0.02759	—	329.079	329.079	0.01335	0.00267	—	330.209
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02018	0.01696	0.15883	0.28426	0.00055	0.00547	—	0.00547	0.00504	—	0.00504	—	54.4828	54.4828	0.00221	0.00044	—	54.6698

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.02346	0.00829	0.37576	0.16098	0.00194	0.00388	0.07576	0.07964	0.00194	0.02039	0.02233	—	252.896	252.896	0.01473	0.03862	0.41337	265.188
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.02280	0.00785	0.40234	0.16561	0.00194	0.00388	0.07576	0.07964	0.00194	0.02039	0.02233	—	252.927	252.927	0.01473	0.03862	0.01074	264.816
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00385	0.00135	0.06594	0.02724	0.00032	0.00065	0.01241	0.01306	0.00032	0.00335	0.00367	—	42.2670	42.2670	0.00246	0.00646	0.02986	44.2820
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00070	0.00025	0.01203	0.00497	0.00006	0.00012	0.00226	0.00238	0.00006	0.00061	0.00067	—	6.99778	6.99778	0.00041	0.00107	0.00494	7.33139
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Below-Grade Civil (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	2.07089	1.73546	12.3478	20.6833	0.04410	0.39977	—	0.39977	0.36779	—	0.36779	—	4,622.37	4,622.37	0.18750	0.03750	—	4,638.23
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.07089	1.73546	12.3478	20.6833	0.04410	0.39977	—	0.39977	0.36779	—	0.36779	—	4,622.37	4,622.37	0.18750	0.03750	—	4,638.23
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74892	0.62762	4.46552	7.48000	0.01595	0.14457	—	0.14457	0.13301	—	0.13301	—	1,671.65	1,671.65	0.06781	0.01356	—	1,677.39
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13668	0.11454	0.81496	1.36510	0.00291	0.02638	—	0.02638	0.02427	—	0.02427	—	276.761	276.761	0.01123	0.00225	—	277.711
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.04691	0.01658	0.75151	0.32196	0.00388	0.00776	0.15151	0.15927	0.00388	0.04079	0.04467	—	505.792	505.792	0.02945	0.07725	0.82674	530.376
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.04559	0.01570	0.80469	0.33122	0.00388	0.00776	0.15151	0.15927	0.00388	0.04079	0.04467	—	505.855	505.855	0.02945	0.07725	0.02147	529.633
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06965	0.06138	0.04712	0.72421	0.00000	0.00000	0.21391	0.21391	0.00000	0.05006	0.05006	—	204.417	204.417	0.00335	0.00144	0.24456	205.173
Vendor	0.01665	0.00584	0.28537	0.11787	0.00140	0.00281	0.05370	0.05651	0.00140	0.01448	0.01588	—	182.926	182.926	0.01065	0.02794	0.12923	191.647
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01271	0.01120	0.00860	0.13217	0.00000	0.00000	0.03904	0.03904	0.00000	0.00914	0.00914	—	33.8435	33.8435	0.00055	0.00024	0.04049	33.9687
Vendor	0.00304	0.00107	0.05208	0.02151	0.00026	0.00051	0.00980	0.01031	0.00026	0.00264	0.00290	—	30.2855	30.2855	0.00176	0.00463	0.02139	31.7293
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Control 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	1.12184	0.93806	8.31185	12.3337	0.02296	0.25921	—	0.25921	0.23847	—	0.23847	—	2,327.00	2,327.00	0.09439	0.01888	—	2,334.98

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12184	0.93806	8.31185	12.3337	0.02296	0.25921	—	0.25921	0.23847	—	0.23847	—	2,327.00	2,327.00	0.09439	0.01888	—	2,334.98
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43249	0.36164	3.20437	4.75486	0.00885	0.09993	—	0.09993	0.09194	—	0.09194	—	897.100	897.100	0.03639	0.00728	—	900.179
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07893	0.06600	0.58480	0.86776	0.00162	0.01824	—	0.01824	0.01678	—	0.01678	—	148.525	148.525	0.00602	0.00120	—	149.035
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.00308	0.00109	0.04927	0.02111	0.00025	0.00051	0.00993	0.01044	0.00025	0.00267	0.00293	—	33.1598	33.1598	0.00193	0.00506	0.05420	34.7715
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.00299	0.00103	0.05276	0.02171	0.00025	0.00051	0.00993	0.01044	0.00025	0.00267	0.00293	—	33.1638	33.1638	0.00193	0.00506	0.00141	34.7227
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07425	0.06543	0.05023	0.77202	0.00000	0.00000	0.22803	0.22803	0.00000	0.05336	0.05336	—	217.912	217.912	0.00357	0.00153	0.26070	218.718
Vendor	0.00116	0.00041	0.01994	0.00824	0.00010	0.00020	0.00375	0.00395	0.00010	0.00101	0.00111	—	12.7843	12.7843	0.00074	0.00195	0.00903	13.3938
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01355	0.01194	0.00917	0.14089	0.00000	0.00000	0.04162	0.04162	0.00000	0.00974	0.00974	—	36.0778	36.0778	0.00059	0.00025	0.04316	36.2112
Vendor	0.00021	0.00007	0.00364	0.00150	0.00002	0.00004	0.00068	0.00072	0.00002	0.00018	0.00020	—	2.11659	2.11659	0.00012	0.00032	0.00150	2.21750
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Control Building Construction (2031) - 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	1.09736	0.91757	8.05481	12.2949	0.02296	0.24372	—	0.24372	0.22422	—	0.22422	—	2,326.99	2,326.99	0.09439	0.01888	—	2,334.98
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.09736	0.91757	8.05481	12.2949	0.02296	0.24372	—	0.24372	0.22422	—	0.22422	—	2,326.99	2,326.99	0.09439	0.01888	—	2,334.98
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36078	0.30167	2.64816	4.04216	0.00755	0.08013	—	0.08013	0.07372	—	0.07372	—	765.039	765.039	0.03103	0.00621	—	767.664
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06584	0.05505	0.48329	0.73769	0.00138	0.01462	—	0.01462	0.01345	—	0.01345	—	126.661	126.661	0.00514	0.00103	—	127.096
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.00305	0.00103	0.04587	0.02034	0.00025	0.00025	0.00968	0.00993	0.00025	0.00267	0.00293	—	31.9397	31.9397	0.00193	0.00481	0.04729	33.4687
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16574	0.16178	0.13294	1.85493	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	541.984	541.984	0.01058	0.02288	0.03598	549.104
Vendor	0.00299	0.00103	0.04910	0.02089	0.00025	0.00025	0.00968	0.00993	0.00025	0.00267	0.00293	—	31.9474	31.9474	0.00193	0.00481	0.00122	33.4303
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05493	0.05362	0.04240	0.62523	0.00000	0.00000	0.19446	0.19446	0.00000	0.04551	0.04551	—	182.831	182.831	0.00304	0.00130	0.19742	183.494
Vendor	0.00099	0.00034	0.01589	0.00677	0.00008	0.00008	0.00312	0.00320	0.00008	0.00086	0.00095	—	10.5018	10.5018	0.00063	0.00158	0.00669	10.9956
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01002	0.00979	0.00774	0.11411	0.00000	0.00000	0.03549	0.03549	0.00000	0.00830	0.00830	—	30.2698	30.2698	0.00050	0.00022	0.03269	30.3795
Vendor	0.00018	0.00006	0.00290	0.00124	0.00002	0.00002	0.00057	0.00058	0.00002	0.00016	0.00017	—	1.73869	1.73869	0.00011	0.00026	0.00111	1.82045
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. Integration of Building with Switchyard (2031) - 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	0.42491	0.35239	3.65983	3.02490	0.00687	0.09525	—	0.09525	0.08763	—	0.08763	—	591.901	591.901	0.02401	0.00480	—	593.932
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42491	0.35239	3.65983	3.02490	0.00687	0.09525	—	0.09525	0.08763	—	0.08763	—	591.901	591.901	0.02401	0.00480	—	593.932
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22867	0.18964	1.96958	1.62788	0.00370	0.05126	—	0.05126	0.04716	—	0.04716	—	318.537	318.537	0.01292	0.00258	—	319.631
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04173	0.03461	0.35945	0.29709	0.00067	0.00935	—	0.00935	0.00861	—	0.00861	—	52.7375	52.7375	0.00214	0.00043	—	52.9185
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01024	0.01002	0.00601	0.14162	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	34.1502	34.1502	0.00037	0.00022	0.07771	34.3034
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00928	0.00906	0.00744	0.10388	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	30.3511	30.3511	0.00059	0.00128	0.00201	30.7498
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00503	0.00492	0.00389	0.05731	0.00000	0.00000	0.01783	0.01783	0.00000	0.00417	0.00417	—	16.7596	16.7596	0.00028	0.00012	0.01810	16.8203
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00092	0.00090	0.00071	0.01046	0.00000	0.00000	0.00325	0.00325	0.00000	0.00076	0.00076	—	2.77473	2.77473	0.00005	0.00002	0.00300	2.78479
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.15. Integration of Building with Switchyard (2032) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42319	0.35095	3.65667	3.02345	0.00687	0.09447	—	0.09447	0.08691	—	0.08691	—	591.900	591.900	0.02401	0.00480	—	593.931
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00497	0.00412	0.04294	0.03550	0.00008	0.00111	—	0.00111	0.00102	—	0.00102	—	6.94990	6.94990	0.00028	0.00006	—	6.97375
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00091	0.00075	0.00784	0.00648	0.00001	0.00020	—	0.00020	0.00019	—	0.00019	—	1.15064	1.15064	0.00005	0.00001	—	1.15458

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00899	0.00869	0.00737	0.09801	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	29.8928	29.8928	0.00052	0.00022	0.00177	29.9738
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00010	0.00010	0.00007	0.00119	0.00000	0.00000	0.00039	0.00039	0.00000	0.00009	0.00009	—	0.36014	0.36014	0.00001	< 0.000005	0.00035	0.36139
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00002	0.00002	0.00001	0.00022	0.00000	0.00000	0.00007	0.00007	0.00000	0.00002	0.00002	—	0.05963	0.05963	< 0.000005	< 0.000005	0.00006	0.05983
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.17. Steel Erection (2031) - 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	1.27483	1.06669	8.74155	10.6925	0.02578	0.25731	—	0.25731	0.23672	—	0.23672	—	2,632.45	2,632.45	0.10678	0.02136	—	2,641.48
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21305	0.17827	1.46092	1.78697	0.00431	0.04300	—	0.04300	0.03956	—	0.03956	—	439.944	439.944	0.01785	0.00357	—	441.454
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03888	0.03253	0.26662	0.32612	0.00079	0.00785	—	0.00785	0.00722	—	0.00722	—	72.8377	72.8377	0.00295	0.00059	—	73.0877
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.04647	0.01570	0.69966	0.31032	0.00388	0.00388	0.14763	0.15151	0.00388	0.04079	0.04467	—	487.183	487.183	0.02945	0.07337	0.72132	510.505
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02792	0.02726	0.02155	0.31783	0.00000	0.00000	0.09885	0.09885	0.00000	0.02313	0.02313	—	92.9393	92.9393	0.00155	0.00066	0.10036	93.2760

Vendor	0.00769	0.00262	0.12321	0.05253	0.00065	0.00065	0.02417	0.02482	0.00065	0.00669	0.00734	—	81.4278	81.4278	0.00492	0.01226	0.05184	85.2567
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00510	0.00497	0.00393	0.05800	0.00000	0.00000	0.01804	0.01804	0.00000	0.00422	0.00422	—	15.3872	15.3872	0.00026	0.00011	0.01662	15.4429
Vendor	0.00140	0.00048	0.02249	0.00959	0.00012	0.00012	0.00441	0.00453	0.00012	0.00122	0.00134	—	13.4813	13.4813	0.00081	0.00203	0.00858	14.1152
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.19. Linear Construction (2031) - 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	0.93141	0.77799	6.11558	6.91807	0.01681	0.25627	—	0.25627	0.23577	—	0.23577	—	1,668.49	1,668.49	0.06768	0.01354	—	1,674.21
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93141	0.77799	6.11558	6.91807	0.01681	0.25627	—	0.25627	0.23577	—	0.23577	—	1,668.49	1,668.49	0.06768	0.01354	—	1,674.21
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16951	0.14159	1.11301	1.25906	0.00306	0.04664	—	0.04664	0.04291	—	0.04291	—	303.658	303.658	0.01232	0.00246	—	304.700
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03094	0.02584	0.20312	0.22978	0.00056	0.00851	—	0.00851	0.00783	—	0.00783	—	50.2741	50.2741	0.00204	0.00041	—	50.4466
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.00465	0.00157	0.06997	0.03103	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	48.7183	48.7183	0.00295	0.00734	0.07213	51.0505
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16574	0.16178	0.13294	1.85493	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	541.984	541.984	0.01058	0.02288	0.03598	549.104
Vendor	0.00456	0.00157	0.07490	0.03187	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	48.7300	48.7300	0.00295	0.00734	0.00186	50.9919
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03041	0.02968	0.02347	0.34611	0.00000	0.00000	0.10765	0.10765	0.00000	0.02519	0.02519	—	101.210	101.210	0.00169	0.00072	0.10929	101.577
Vendor	0.00084	0.00029	0.01342	0.00572	0.00007	0.00007	0.00263	0.00270	0.00007	0.00073	0.00080	—	8.86743	8.86743	0.00054	0.00134	0.00564	9.28439
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00555	0.00542	0.00428	0.06317	0.00000	0.00000	0.01965	0.01965	0.00000	0.00460	0.00460	—	16.7565	16.7565	0.00028	0.00012	0.01809	16.8172

Vendor	0.00015	0.00005	0.00245	0.00104	0.00001	0.00001	0.00048	0.00049	0.00001	0.00013	0.00015	—	1.46810	1.46810	0.00009	0.00022	0.00093	1.53714
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.21. Linear Construction (2032) - 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	0.90630	0.75689	5.87412	6.85285	0.01681	0.23989	—	0.23989	0.22070	—	0.22070	—	1,668.49	1,668.49	0.06768	0.01354	—	1,674.21
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90630	0.75689	5.87412	6.85285	0.01681	0.23989	—	0.23989	0.22070	—	0.22070	—	1,668.49	1,668.49	0.06768	0.01354	—	1,674.21
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33343	0.27847	2.16112	2.52121	0.00619	0.08826	—	0.08826	0.08120	—	0.08120	—	613.847	613.847	0.02490	0.00498	—	615.953
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06085	0.05082	0.39441	0.46012	0.00113	0.01611	—	0.01611	0.01482	—	0.01482	—	101.629	101.629	0.00412	0.00082	—	101.978
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.17103	0.08717	2.39819	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	600.564	600.564	0.00661	0.00397	1.22263	603.134
Vendor	0.00417	0.00157	0.06551	0.02987	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	46.9104	46.9104	0.00251	0.00695	0.06103	49.1051
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16045	0.15516	0.13162	1.75016	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	533.800	533.800	0.00926	0.00397	0.03165	535.246
Vendor	0.00413	0.00153	0.07014	0.03066	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	46.9265	46.9265	0.00251	0.00695	0.00159	49.0617
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05854	0.05708	0.04000	0.66356	0.00000	0.00000	0.21761	0.21761	0.00000	0.05092	0.05092	—	201.507	201.507	0.00292	0.00146	0.19406	202.209
Vendor	0.00153	0.00058	0.02536	0.01112	0.00014	0.00014	0.00532	0.00546	0.00014	0.00147	0.00162	—	17.2612	17.2612	0.00092	0.00256	0.00970	18.0558
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01068	0.01042	0.00730	0.12110	0.00000	0.00000	0.03971	0.03971	0.00000	0.00929	0.00929	—	33.3617	33.3617	0.00048	0.00024	0.03213	33.4780
Vendor	0.00028	0.00011	0.00463	0.00203	0.00003	0.00003	0.00097	0.00100	0.00003	0.00027	0.00029	—	2.85778	2.85778	0.00015	0.00042	0.00161	2.98935
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.23. Paving (2031) - 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	0.74689	0.62759	6.12541	9.88333	0.01395	0.20981	—	0.20981	0.19303	—	0.19303	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.46990	0.46990	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03274	0.02751	0.26851	0.43324	0.00061	0.00920	—	0.00920	0.00846	—	0.00846	—	66.2194	66.2194	0.00269	0.00054	—	66.4466
Paving	0.02060	0.02060	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00598	0.00502	0.04900	0.07907	0.00011	0.00168	—	0.00168	0.00154	—	0.00154	—	10.9634	10.9634	0.00044	0.00009	—	11.0010
Paving	0.00376	0.00376	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04573	0.04474	0.02685	0.63222	0.00000	0.00000	0.15155	0.15155	0.00000	0.03552	0.03552	—	152.456	152.456	0.00165	0.00099	0.34691	153.140

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00183	0.00179	0.00141	0.02084	0.00000	0.00000	0.00648	0.00648	0.00000	0.00152	0.00152	—	6.09438	6.09438	0.00010	0.00004	0.00658	6.11646
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00033	0.00033	0.00026	0.00380	0.00000	0.00000	0.00118	0.00118	0.00000	0.00028	0.00028	—	1.00899	1.00899	0.00002	0.00001	0.00109	1.01265
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.23255	0.23255	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07469	0.07469	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.06196	0.05718	0.00293	0.34794	0.00002	0.00062	—	0.00062	0.00047	—	0.00047	—	1.43077	1.43077	0.00006	0.00001	—	1.43593
Total	0.36920	0.36442	0.00293	0.34794	0.00002	0.00062	—	0.00062	0.00047	—	0.00047	—	1.43077	1.43077	0.00006	0.00001	—	1.43593
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.23255	0.23255	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.07469	0.07469	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.30724	0.30724	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04244	0.04244	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01363	0.01363	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00775	0.00715	0.00037	0.04349	< 0.000005	0.00008	—	0.00008	0.00006	—	0.00006	—	0.16225	0.16225	0.00001	< 0.000005	—	0.16283
Total	0.06382	0.06322	0.00037	0.04349	< 0.000005	0.00008	—	0.00008	0.00006	—	0.00006	—	0.16225	0.16225	0.00001	< 0.000005	—	0.16283

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.10. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clearing and Grubbing	Site Preparation	1/1/2030	1/28/2030	5.00000	20.0000	—
Grading, Drainage and Access Road	Grading	1/29/2030	6/18/2030	5.00000	101.000	—
Fencing/Wall	Building Construction	2/19/2030	5/14/2030	5.00000	61.0000	—
Below-Grade Civil	Building Construction	4/1/2030	10/1/2030	5.00000	132.000	—
Control Building Construction	Building Construction	6/18/2030	6/17/2031	5.00000	261.000	—
Integration of Building with Switchyard	Building Construction	4/1/2031	1/6/2032	5.00000	201.000	—
Steel Erection	Building Construction	7/8/2031	9/30/2031	5.00000	61.0000	—
Linear Construction	Building Construction	9/30/2031	7/6/2032	5.00000	201.000	—
Paving	Paving	6/17/2031	7/8/2031	5.00000	16.0000	—

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
Clearing and Grubbing	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Clearing and Grubbing	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading, Drainage and Access Road	Graders	Diesel	Average	2.00000	8.00000	148.000	0.41000
Grading, Drainage and Access Road	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Grading, Drainage and Access Road	Plate Compactors	Diesel	Average	2.00000	8.00000	8.00000	0.43000
Grading, Drainage and Access Road	Off-Highway Trucks	Diesel	Average	2.00000	4.00000	376.000	0.38000
Grading, Drainage and Access Road	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Grading, Drainage and Access Road	Sweepers/Scrubbers	Diesel	Average	1.000000	4.00000	36.0000	0.46000
Grading, Drainage and Access Road	Excavators	Diesel	Average	2.00000	8.00000	172.000	0.38000
Grading, Drainage and Access Road	Crawler Tractors	Diesel	Average	2.00000	8.00000	363.000	0.43000
Fencing/Wall	Skid Steer Loaders	Diesel	Average	3.00000	8.00000	71.0000	0.37000
Fencing/Wall	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	8.00000	107.000	0.37000
Fencing/Wall	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Below-Grade Civil	Bore/Drill Rigs	Diesel	Average	2.00000	8.00000	83.0000	0.50000
Below-Grade Civil	Off-Highway Trucks	Diesel	Average	3.00000	4.00000	376.000	0.38000
Below-Grade Civil	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Below-Grade Civil	Generator Sets	Diesel	Average	2.00000	8.00000	20.0000	0.74000

Below-Grade Civil	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Below-Grade Civil	Sweepers/Scrubbers	Diesel	Average	1.000000	4.00000	36.0000	0.46000
Below-Grade Civil	Excavators	Diesel	Average	1.000000	8.00000	172.000	0.38000
Control Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Control Building Construction	Forklifts	Diesel	Average	3.00000	6.00000	82.0000	0.20000
Control Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	20.0000	0.74000
Control Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Control Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Integration of Building with Switchyard	Aerial Lifts	Diesel	Average	2.00000	8.00000	46.0000	0.31000
Integration of Building with Switchyard	Generator Sets	Diesel	Average	2.00000	8.00000	20.0000	0.74000
Steel Erection	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Steel Erection	Aerial Lifts	Diesel	Average	2.00000	8.00000	46.0000	0.31000
Steel Erection	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Steel Erection	Off-Highway Trucks	Diesel	Average	2.00000	2.00000	376.000	0.38000
Steel Erection	Generator Sets	Diesel	Average	1.000000	8.00000	20.0000	0.74000
Steel Erection	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Steel Erection	Sweepers/Scrubbers	Diesel	Average	1.000000	8.00000	36.0000	0.46000
Linear Construction	Cranes	Diesel	Average	1.000000	8.00000	367.000	0.29000
Linear Construction	Generator Sets	Diesel	Average	2.00000	8.00000	20.0000	0.74000
Linear Construction	Sweepers/Scrubbers	Diesel	Average	1.000000	4.00000	36.0000	0.46000
Linear Construction	Other Construction Equipment	Diesel	Average	1.000000	6.00000	101.000	0.42000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000

Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clearing and Grubbing	Worker	17.5000	14.3000	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	2.00000	8.80000	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00000	20.0000	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Grading, Drainage and Access Road	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Grading, Drainage and Access Road	Vendor	2.00000	8.80000	HHDT,MHDT
Grading, Drainage and Access Road	Hauling	73.0198	20.0000	HHDT
Grading, Drainage and Access Road	Onsite truck	—	—	HHDT
Fencing/Wall	Worker	0.00000	14.3000	LDA,LDT1,LDT2
Fencing/Wall	Vendor	10.00000	8.80000	HHDT,MHDT
Fencing/Wall	Hauling	0.00000	20.0000	HHDT
Fencing/Wall	Onsite truck	—	—	HHDT
Below-Grade Civil	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Below-Grade Civil	Vendor	20.0000	8.80000	HHDT,MHDT
Below-Grade Civil	Hauling	0.00000	20.0000	HHDT
Below-Grade Civil	Onsite truck	—	—	HHDT
Control Building Construction	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Control Building Construction	Vendor	1.31120	8.80000	HHDT,MHDT
Control Building Construction	Hauling	0.00000	20.0000	HHDT
Control Building Construction	Onsite truck	—	—	HHDT
Integration of Building with Switchyard	Worker	3.36000	14.3000	LDA,LDT1,LDT2

Integration of Building with Switchyard	Vendor	0.00000	8.80000	HHDT,MHDT
Integration of Building with Switchyard	Hauling	0.00000	20.0000	HHDT
Integration of Building with Switchyard	Onsite truck	—	—	HHDT
Steel Erection	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Steel Erection	Vendor	20.0000	8.80000	HHDT,MHDT
Steel Erection	Hauling	0.00000	20.0000	HHDT
Steel Erection	Onsite truck	—	—	HHDT
Linear Construction	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Linear Construction	Vendor	2.00000	8.80000	HHDT,MHDT
Linear Construction	Hauling	0.00000	20.0000	HHDT
Linear Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	14.3000	LDA,LDT1,LDT2
Paving	Vendor	—	8.80000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

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)

Clearing and Grubbing	—	—	30.0000	0.00000	0.00000
Grading, Drainage and Access Road	59,000.0	—	303.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	17.9063

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

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	General Light Industry	0.00000	0%
Paving	Other Asphalt Surfaces	2.86961	100%
Paving	Other Non-Asphalt Surfaces	15.0367	0%
Paving	User Defined Recreational	0.00000	0%
Paving	User Defined Industrial	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00000	374.840	0.01290	0.00170
2031	0.00000	374.840	0.01290	0.00170
2032	0.00000	374.840	0.01290	0.00170

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	4.00000	0.00000	0.00000	104.000	44.3200	0.00000	0.00000	1,152.32

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
General Light Industry	Wood Fireplaces	0	0
General Light Industry	Gas Fireplaces	0	0
General Light Industry	Propane Fireplaces	0	0
General Light Industry	Electric Fireplaces	0	0
General Light Industry	No Fireplaces	0	0
General Light Industry	Conventional Wood Stoves	0	0
General Light Industry	Catalytic Wood Stoves	0	0
General Light Industry	Non-Catalytic Wood Stoves	0	0
General Light Industry	Pellet Wood Stoves	0	0
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0

Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
User Defined Recreational	Wood Fireplaces	0	0
User Defined Recreational	Gas Fireplaces	0	0
User Defined Recreational	Propane Fireplaces	0	0
User Defined Recreational	Electric Fireplaces	0	0
User Defined Recreational	No Fireplaces	0	0
User Defined Recreational	Conventional Wood Stoves	0	0
User Defined Recreational	Catalytic Wood Stoves	0	0
User Defined Recreational	Non-Catalytic Wood Stoves	0	0
User Defined Recreational	Pellet Wood Stoves	0	0
User Defined Industrial	Wood Fireplaces	0	0
User Defined Industrial	Gas Fireplaces	0	0
User Defined Industrial	Propane Fireplaces	0	0
User Defined Industrial	Electric Fireplaces	0	0
User Defined Industrial	No Fireplaces	0	0
User Defined Industrial	Conventional Wood Stoves	0	0
User Defined Industrial	Catalytic Wood Stoves	0	0
User Defined Industrial	Non-Catalytic Wood Stoves	0	0
User Defined Industrial	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

0.00000	0.00000	12,000.0	4,000.00	46,800.0

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00000	374.840	0.0129	0.0017	0.00000
Other Asphalt Surfaces	0.00000	374.840	0.0129	0.0017	0.00000
Other Non-Asphalt Surfaces	0.00000	374.840	0.0129	0.0017	0.00000
User Defined Recreational	0.00000	374.840	0.0129	0.0017	0.00000
User Defined Industrial	0.00000	374.840	0.0129	0.0017	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
User Defined Recreational	0.00000	0.00000
User Defined Industrial	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	0.00000	0.00000
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
User Defined Recreational	0.00000	0.00000
User Defined Industrial	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

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

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.7600	annual days of extreme heat
Extreme Precipitation	5.50000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.74000	annual hectares burned

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

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.5999
AQ-PM	23.6839
AQ-DPM	22.3149
Drinking Water	78.7811
Lead Risk Housing	41.1720
Pesticides	73.7931
Toxic Releases	30.3326
Traffic	28.4750
Effect Indicators	—
CleanUp Sites	86.5435
Groundwater	88.8594
Haz Waste Facilities/Generators	99.8015
Impaired Water Bodies	51.2180
Solid Waste	99.9084
Sensitive Population	—
Asthma	50.1994

Cardio-vascular	53.9008
Low Birth Weights	36.4126
Socioeconomic Factor Indicators	—
Education	47.5070
Housing	61.9392
Linguistic	43.8760
Poverty	58.5050
Unemployment	62.4024

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	36.84075452
Employed	20.45425382
Median HI	23.26446811
Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—
Auto Access	37.4566919
Active commuting	70.79430258
Social	—
2-parent households	14.75683306
Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675

Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
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	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2
Heart Attack ER Admissions	53.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1
Traffic Density	37.8
Traffic Access	23.0
Other Indices	—
Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0000
Healthy Places Index Score for Project Location (b)	29.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes

Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

8.1. Justifications

Screen	Justification
Land Use	Land use inputs from RFI.
Construction: Construction Phases	Project-specific construction schedule.
Construction: Off-Road Equipment	Project-specific equipment list.
Construction: Dust From Material Movement	All excavated material reused onsite, import only during grading phase.
Construction: Trips and VMT	Maximum 30 workers, vendor trucks for water trucks and equipment delivery. Haul trucks based on material quantities.
Operations: Fleet Mix	Assume operational trips split 50/50 LHD1 and LHD2.
Operations: Energy Use	Assume negligible energy use associated with lighting for facility. Site would be operated remotely.
Operations: Water and Waste Water	Site would be operated remotely. Assume no water use.
Operations: Solid Waste	Site would be operated remotely. Assume no waste generated.
Operations: Refrigerants	Site would be operated remotely. Assume no refrigerant use.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Building Area	sq. ft	4,000.00	8,000.00
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.00000	1.000000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.00000	4.11000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Paving	Paving	Start Date	12/6/2031	6/17/2031
Paving	Paving	End Date	1/3/2032	7/8/2031
Paving	Paving	Work Days per Phase	20.0000	16.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Grading, Drainage and Access Road	Graders	Number per Day	1.000000	2.00000
Grading, Drainage and Access Road	Off-Highway Trucks	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Tractors/Loaders/Backhoes	Hours Per Day	8.00000	6.00000
Below-Grade Civil	Off-Highway Trucks	Hours Per Day	8.00000	4.00000
Control Building Construction	Forklifts	Hours Per Day	8.00000	6.00000
Control Building Construction	Generator Sets	Horsepower	14.0000	20.0000
Integration of Building with Switchyard	Aerial Lifts	Number per Day	3.00000	2.00000

Integration of Building with Switchyard	Aerial Lifts	Horsepower	82.0000	46.0000
Integration of Building with Switchyard	Aerial Lifts	Load Factor	0.20000	0.31000
Steel Erection	Cranes	Hours Per Day	7.00000	8.00000
Steel Erection	Off-Highway Trucks	Hours Per Day	8.00000	2.00000
Linear Construction	Cranes	Hours Per Day	7.00000	8.00000
Linear Construction	Generator Sets	Number per Day	1.000000	2.00000
Linear Construction	Generator Sets	Horsepower	14.0000	20.0000
Linear Construction	Sweepers/Scrubbers	Hours Per Day	8.00000	4.00000

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Grading, Drainage and Access Road	Material Imported	Cubic Yards	—	59,000.0
Grading, Drainage and Access Road	Total Acres Graded	acres	404.000	303.000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Grading, Drainage and Access Road	Worker	One-Way Trips per Day	35.0000	60.0000
Fencing/Wall	Worker	One-Way Trips per Day	3.36000	0.00000
Fencing/Wall	Vendor	One-Way Trips per Day	1.31120	10.00000
Below-Grade Civil	Worker	One-Way Trips per Day	3.36000	60.0000
Below-Grade Civil	Vendor	One-Way Trips per Day	1.31120	20.0000
Control Building Construction	Worker	One-Way Trips per Day	3.36000	60.0000
Integration of Building with Switchyard	Vendor	One-Way Trips per Day	1.31120	0.00000
Steel Erection	Worker	One-Way Trips per Day	3.36000	60.0000
Steel Erection	Vendor	One-Way Trips per Day	1.31120	20.0000
Linear Construction	Worker	One-Way Trips per Day	3.36000	60.0000

Linear Construction	Vendor	One-Way Trips per Day	1.31120	2.00000

8.5. Operations

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
General Light Industry	Electricity	kWh/yr	71,927.6	0.00000
General Light Industry	Electricity (Subject to Title 24)	kWh/yr	31,325.8	0.00000
General Light Industry	Electricity (Not Subject to Title 24)	kWh/yr	40,601.8	0.00000
General Light Industry	Natural Gas	kBTU/yr	316,367	0.00000
General Light Industry	Natural Gas (Subject to Title 24)	kBTU/yr	132,640	0.00000
General Light Industry	Natural Gas (Not Subject to Title 24)	kBTU/yr	183,727	0.00000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
General Light Industry	Indoor Water	gal/year	925,000	0.00000

8.5.5. Solid Waste

Land Use	Model Parameter	Units	Default Value	New Value
General Light Industry	Solid Waste Generation Rate	ton/1000sqft/yr	1.24000	0.00000

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3.3. Grading, Drainage and Access Road (2030) - Unmitigated

3.5. Fencing/Wall (2030) - Unmitigated

3.7. Below-Grade Civil (2030) - Unmitigated

3.9. Control Building Construction (2030) - Unmitigated

3.11. Control Building Construction (2031) - Unmitigated

3.13. Integration of Building with Switchyard (2031) - Unmitigated

3.15. Integration of Building with Switchyard (2032) - Unmitigated

3.17. Steel Erection (2031) - Unmitigated

3.19. Linear Construction (2031) - Unmitigated

3.21. Linear Construction (2032) - Unmitigated

3.23. Paving (2031) - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.4. Dust from Material Movement

8.4.6. Trips and VMT

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SMUD Jackson Substation Annual Construction
Construction Start Date	4/2/2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70000
Precipitation (days)	37.8000
Location	38.5164035153617, -121.29661252992364
County	Sacramento
City	Unincorporated
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	708
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.37

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
General Light Industry	4.00000	1000sqft	0.09183	8,000.00	0.00000	—	—	Control Building

Other Asphalt Surfaces	125.000	1000sqft	2.86961	0.00000	0.00000	—	—	Asphalt areas
Other Non-Asphalt Surfaces	655.000	1000sqft	15.0367	0.00000	0.00000	—	—	Concrete areas
User Defined Recreational	1.000000	User Defined Unit	1.000000	0.00000	0.00000	—	—	Detention basin
User Defined Industrial	1.000000	User Defined Unit	4.11000	0.00000	0.00000	—	—	Transmission lines

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	5.38029	4.21183	32.1980	47.7431	0.13075	0.97335	4.22167	5.19502	0.89683	0.93579	1.83262	—	17,004.7	17,004.7	0.81097	0.96703	13.0746	17,318.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.52872	2.96939	25.3343	29.0370	0.09464	1.06706	7.85820	8.92526	0.98137	3.98548	4.96685	—	11,891.8	11,891.8	0.63676	0.88026	0.24591	12,170.3
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.89807	1.50360	11.7643	16.5067	0.04349	0.36583	1.71908	2.08491	0.33635	0.50608	0.84243	—	5,569.60	5,569.60	0.26115	0.28102	1.76858	5,661.64
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.34640	0.27441	2.14698	3.01247	0.00794	0.06676	0.31373	0.38050	0.06138	0.09236	0.15374	—	922.111	922.111	0.04324	0.04653	0.29281	937.350

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	5.38029	4.21183	32.1980	47.7431	0.13075	0.97335	4.22167	5.19502	0.89683	0.93579	1.83262	—	17,004.7	17,004.7	0.81097	0.96703	13.0746	17,318.6
2031	2.23333	1.95827	12.2750	19.7954	0.03333	0.34880	1.40876	1.66391	0.32121	0.33701	0.57209	—	4,371.45	4,371.45	0.16335	0.10574	3.64642	4,408.94
2032	0.60224	0.52456	2.93366	5.01119	0.00643	0.11362	0.62097	0.73459	0.10456	0.14617	0.25073	—	1,150.11	1,150.11	0.02952	0.01500	1.28367	1,156.60
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	3.52872	2.96939	25.3343	29.0370	0.09464	1.06706	7.85820	8.92526	0.98137	3.98548	4.96685	—	11,891.8	11,891.8	0.63676	0.88026	0.24591	12,170.3
2031	0.73638	0.63445	4.31463	7.32297	0.00919	0.14224	0.65492	0.79716	0.13089	0.15413	0.28502	—	1,432.75	1,432.75	0.04735	0.03738	0.03985	1,444.30
2032	0.72551	0.62335	4.26299	5.60313	0.00883	0.13943	0.65492	0.79434	0.12830	0.15413	0.28243	—	1,335.03	1,335.03	0.04168	0.01702	0.03501	1,341.18
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.89807	1.50360	11.7643	16.5067	0.04349	0.36583	1.71908	2.08491	0.33635	0.50608	0.84243	—	5,569.60	5,569.60	0.26115	0.28102	1.76858	5,661.64
2031	0.58642	0.50482	3.55604	5.58037	0.00893	0.09534	0.45519	0.55053	0.08777	0.10780	0.19557	—	1,286.56	1,286.56	0.04463	0.02441	0.49591	1,295.44
2032	0.21782	0.18849	1.10352	1.63961	0.00239	0.04210	0.22332	0.26543	0.03875	0.05249	0.09123	—	406.654	406.654	0.01146	0.00554	0.20410	408.796
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.34640	0.27441	2.14698	3.01247	0.00794	0.06676	0.31373	0.38050	0.06138	0.09236	0.15374	—	922.111	922.111	0.04324	0.04653	0.29281	937.350
2031	0.10702	0.09213	0.64898	1.01842	0.00163	0.01740	0.08307	0.10047	0.01602	0.01967	0.03569	—	213.004	213.004	0.00739	0.00404	0.08210	214.475
2032	0.03975	0.03440	0.20139	0.29923	0.00044	0.00768	0.04076	0.04844	0.00707	0.00958	0.01665	—	67.3263	67.3263	0.00190	0.00092	0.03379	67.6808

3. Construction Emissions Details

3.1. Clearing and Grubbing (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.47350	2.91871	25.2092	28.4319	0.04889	1.06629	—	1.06629	0.98098	—	0.98098	—	5,295.67	5,295.67	0.21482	0.04296	—	5,313.84
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19033	0.15993	1.38132	1.55791	0.00268	0.05843	—	0.05843	0.05375	—	0.05375	—	290.174	290.174	0.01177	0.00235	—	291.169
Dust From Material Movement	—	—	—	—	—	—	0.42007	0.42007	—	0.21589	0.21589	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03474	0.02919	0.25209	0.28432	0.00049	0.01066	—	0.01066	0.00981	—	0.00981	—	48.0415	48.0415	0.00195	0.00039	—	48.2064

Dust From Material Movement	—	—	—	—	—	—	0.07666	0.07666	—	0.03940	0.03940	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05066	0.04911	0.04468	0.57196	0.00000	0.00000	0.17681	0.17681	0.00000	0.04144	0.04144	—	160.674	160.674	0.00309	0.00667	0.01183	162.752
Vendor	0.00456	0.00157	0.08047	0.03312	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5855	50.5855	0.00295	0.00772	0.00215	52.9633
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00308	0.00271	0.00208	0.03200	0.00000	0.00000	0.00945	0.00945	0.00000	0.00221	0.00221	—	9.03357	9.03357	0.00015	0.00006	0.01081	9.06698
Vendor	0.00025	0.00009	0.00432	0.00179	0.00002	0.00004	0.00081	0.00086	0.00002	0.00022	0.00024	—	2.77161	2.77161	0.00016	0.00042	0.00196	2.90374
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00056	0.00049	0.00038	0.00584	0.00000	0.00000	0.00173	0.00173	0.00000	0.00040	0.00040	—	1.49561	1.49561	0.00002	0.00001	0.00179	1.50114
Vendor	0.00005	0.00002	0.00079	0.00033	< 0.000005	0.00001	0.00015	0.00016	< 0.000005	0.00004	0.00004	—	0.45887	0.45887	0.00003	0.00007	0.00032	0.48075
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Grading, Drainage and Access Road (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	2.36490	1.98662	13.0260	19.8980	0.05521	0.55963	—	0.55963	0.51486	—	0.51486	—	5,953.14	5,953.14	0.24149	0.04830	—	5,973.57
Dust From Material Movement	—	—	—	—	—	—	0.84047	0.84047	—	0.09133	0.09133	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.36490	1.98662	13.0260	19.8980	0.05521	0.55963	—	0.55963	0.51486	—	0.51486	—	5,953.14	5,953.14	0.24149	0.04830	—	5,973.57
Dust From Material Movement	—	—	—	—	—	—	0.84047	0.84047	—	0.09133	0.09133	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65440	0.54972	3.60446	5.50603	0.01528	0.15486	—	0.15486	0.14247	—	0.14247	—	1,647.31	1,647.31	0.06682	0.01336	—	1,652.96
Dust From Material Movement	—	—	—	—	—	—	0.23257	0.23257	—	0.02527	0.02527	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11943	0.10032	0.65781	1.00485	0.00279	0.02826	—	0.02826	0.02600	—	0.02600	—	272.731	272.731	0.01106	0.00221	—	273.666
Dust From Material Movement	—	—	—	—	—	—	0.04244	0.04244	—	0.00461	0.00461	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.00469	0.00166	0.07515	0.03220	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5792	50.5792	0.00295	0.00772	0.08267	53.0376
Hauling	0.49904	0.10947	7.32142	3.23733	0.03381	0.06439	1.38598	1.45038	0.06439	0.37064	0.43504	—	4,727.32	4,727.32	0.35416	0.75983	7.41254	4,970.01
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.00456	0.00157	0.08047	0.03312	0.00039	0.00078	0.01515	0.01593	0.00039	0.00408	0.00447	—	50.5855	50.5855	0.00295	0.00772	0.00215	52.9633
Hauling	0.49421	0.10464	7.90256	3.26631	0.03381	0.06600	1.38598	1.45198	0.06439	0.37064	0.43504	—	4,727.60	4,727.60	0.35255	0.75983	0.19245	4,963.04
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05329	0.04696	0.03605	0.55413	0.00000	0.00000	0.16367	0.16367	0.00000	0.03830	0.03830	—	156.410	156.410	0.00256	0.00110	0.18712	156.988
Vendor	0.00127	0.00045	0.02183	0.00902	0.00011	0.00021	0.00411	0.00432	0.00011	0.00111	0.00122	—	13.9966	13.9966	0.00082	0.00214	0.00989	14.6639
Hauling	0.13765	0.02940	2.14575	0.89893	0.00935	0.01782	0.37659	0.39441	0.01782	0.10083	0.11865	—	1,308.14	1,308.14	0.09800	0.21025	0.88543	1,374.13
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00973	0.00857	0.00658	0.10113	0.00000	0.00000	0.02987	0.02987	0.00000	0.00699	0.00699	—	25.8954	25.8954	0.00042	0.00018	0.03098	25.9912
Vendor	0.00023	0.00008	0.00398	0.00165	0.00002	0.00004	0.00075	0.00079	0.00002	0.00020	0.00022	—	2.31730	2.31730	0.00013	0.00035	0.00164	2.42777
Hauling	0.02512	0.00537	0.39160	0.16405	0.00171	0.00325	0.06873	0.07198	0.00325	0.01840	0.02165	—	216.578	216.578	0.01623	0.03481	0.14659	227.503

3.5. Fencing/Wall (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	0.11656	0.09794	0.97041	1.75483	0.00330	0.03149	—	0.03149	0.02897	—	0.02897	—	356.701	356.701	0.01447	0.00289	—	357.925
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11656	0.09794	0.97041	1.75483	0.00330	0.03149	—	0.03149	0.02897	—	0.02897	—	356.701	356.701	0.01447	0.00289	—	357.925
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01948	0.01637	0.16218	0.29327	0.00055	0.00526	—	0.00526	0.00484	—	0.00484	—	59.6130	59.6130	0.00242	0.00048	—	59.8175
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00355	0.00299	0.02960	0.05352	0.00010	0.00096	—	0.00096	0.00088	—	0.00088	—	9.86961	9.86961	0.00040	0.00008	—	9.90348

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.02346	0.00829	0.37576	0.16098	0.00194	0.00388	0.07576	0.07964	0.00194	0.02039	0.02233	—	252.896	252.896	0.01473	0.03862	0.41337	265.188
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.02280	0.00785	0.40234	0.16561	0.00194	0.00388	0.07576	0.07964	0.00194	0.02039	0.02233	—	252.927	252.927	0.01473	0.03862	0.01074	264.816
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00385	0.00135	0.06594	0.02724	0.00032	0.00065	0.01241	0.01306	0.00032	0.00335	0.00367	—	42.2670	42.2670	0.00246	0.00646	0.02986	44.2820
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00070	0.00025	0.01203	0.00497	0.00006	0.00012	0.00226	0.00238	0.00006	0.00061	0.00067	—	6.99778	6.99778	0.00041	0.00107	0.00494	7.33139
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Below-Grade Civil (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	1.34412	1.12803	7.01688	10.7862	0.02828	0.23559	—	0.23559	0.21675	—	0.21675	—	3,016.11	3,016.11	0.12235	0.02447	—	3,026.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34412	1.12803	7.01688	10.7862	0.02828	0.23559	—	0.23559	0.21675	—	0.21675	—	3,016.11	3,016.11	0.12235	0.02447	—	3,026.46
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48609	0.40795	2.53761	3.90076	0.01023	0.08520	—	0.08520	0.07838	—	0.07838	—	1,090.76	1,090.76	0.04425	0.00885	—	1,094.50
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08871	0.07445	0.46311	0.71189	0.00187	0.01555	—	0.01555	0.01431	—	0.01431	—	180.587	180.587	0.00733	0.00147	—	181.207
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.04691	0.01658	0.75151	0.32196	0.00388	0.00776	0.15151	0.15927	0.00388	0.04079	0.04467	—	505.792	505.792	0.02945	0.07725	0.82674	530.376
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.04559	0.01570	0.80469	0.33122	0.00388	0.00776	0.15151	0.15927	0.00388	0.04079	0.04467	—	505.855	505.855	0.02945	0.07725	0.02147	529.633
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06965	0.06138	0.04712	0.72421	0.00000	0.00000	0.21391	0.21391	0.00000	0.05006	0.05006	—	204.417	204.417	0.00335	0.00144	0.24456	205.173
Vendor	0.01665	0.00584	0.28537	0.11787	0.00140	0.00281	0.05370	0.05651	0.00140	0.01448	0.01588	—	182.926	182.926	0.01065	0.02794	0.12923	191.647
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01271	0.01120	0.00860	0.13217	0.00000	0.00000	0.03904	0.03904	0.00000	0.00914	0.00914	—	33.8435	33.8435	0.00055	0.00024	0.04049	33.9687
Vendor	0.00304	0.00107	0.05208	0.02151	0.00026	0.00051	0.00980	0.01031	0.00026	0.00264	0.00290	—	30.2855	30.2855	0.00176	0.00463	0.02139	31.7293
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Control 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	0.48421	0.40370	3.63158	5.45563	0.00894	0.10468	—	0.10468	0.09631	—	0.09631	—	858.825	858.825	0.03484	0.00697	—	861.772

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48421	0.40370	3.63158	5.45563	0.00894	0.10468	—	0.10468	0.09631	—	0.09631	—	858.825	858.825	0.03484	0.00697	—	861.772
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18667	0.15563	1.40004	2.10325	0.00344	0.04036	—	0.04036	0.03713	—	0.03713	—	331.093	331.093	0.01343	0.00269	—	332.229
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03407	0.02840	0.25551	0.38384	0.00063	0.00736	—	0.00736	0.00678	—	0.00678	—	54.8162	54.8162	0.00222	0.00044	—	55.0043
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21111	0.18823	0.10873	2.66354	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	619.913	619.913	0.00794	0.00397	1.56616	622.860
Vendor	0.00308	0.00109	0.04927	0.02111	0.00025	0.00051	0.00993	0.01044	0.00025	0.00267	0.00293	—	33.1598	33.1598	0.00193	0.00506	0.05420	34.7715
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.17368	0.16839	0.15318	1.96101	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	550.882	550.882	0.01058	0.02288	0.04057	558.007
Vendor	0.00299	0.00103	0.05276	0.02171	0.00025	0.00051	0.00993	0.01044	0.00025	0.00267	0.00293	—	33.1638	33.1638	0.00193	0.00506	0.00141	34.7227
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07425	0.06543	0.05023	0.77202	0.00000	0.00000	0.22803	0.22803	0.00000	0.05336	0.05336	—	217.912	217.912	0.00357	0.00153	0.26070	218.718
Vendor	0.00116	0.00041	0.01994	0.00824	0.00010	0.00020	0.00375	0.00395	0.00010	0.00101	0.00111	—	12.7843	12.7843	0.00074	0.00195	0.00903	13.3938
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01355	0.01194	0.00917	0.14089	0.00000	0.00000	0.04162	0.04162	0.00000	0.00974	0.00974	—	36.0778	36.0778	0.00059	0.00025	0.04316	36.2112
Vendor	0.00021	0.00007	0.00364	0.00150	0.00002	0.00004	0.00068	0.00072	0.00002	0.00018	0.00020	—	2.11659	2.11659	0.00012	0.00032	0.00150	2.21750
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Control Building Construction (2031) - 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	0.47344	0.39470	3.55273	5.44715	0.00894	0.09737	—	0.09737	0.08958	—	0.08958	—	858.823	858.823	0.03484	0.00697	—	861.770
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.47344	0.39470	3.55273	5.44715	0.00894	0.09737	—	0.09737	0.08958	—	0.08958	—	858.823	858.823	0.03484	0.00697	—	861.770
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15565	0.12977	1.16802	1.79084	0.00294	0.03201	—	0.03201	0.02945	—	0.02945	—	282.353	282.353	0.01145	0.00229	—	283.322
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02841	0.02368	0.21316	0.32683	0.00054	0.00584	—	0.00584	0.00537	—	0.00537	—	46.7467	46.7467	0.00190	0.00038	—	46.9071
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.00305	0.00103	0.04587	0.02034	0.00025	0.00025	0.00968	0.00993	0.00025	0.00267	0.00293	—	31.9397	31.9397	0.00193	0.00481	0.04729	33.4687
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16574	0.16178	0.13294	1.85493	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	541.984	541.984	0.01058	0.02288	0.03598	549.104
Vendor	0.00299	0.00103	0.04910	0.02089	0.00025	0.00025	0.00968	0.00993	0.00025	0.00267	0.00293	—	31.9474	31.9474	0.00193	0.00481	0.00122	33.4303
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05493	0.05362	0.04240	0.62523	0.00000	0.00000	0.19446	0.19446	0.00000	0.04551	0.04551	—	182.831	182.831	0.00304	0.00130	0.19742	183.494
Vendor	0.00099	0.00034	0.01589	0.00677	0.00008	0.00008	0.00312	0.00320	0.00008	0.00086	0.00095	—	10.5018	10.5018	0.00063	0.00158	0.00669	10.9956
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01002	0.00979	0.00774	0.11411	0.00000	0.00000	0.03549	0.03549	0.00000	0.00830	0.00830	—	30.2698	30.2698	0.00050	0.00022	0.03269	30.3795
Vendor	0.00018	0.00006	0.00290	0.00124	0.00002	0.00002	0.00057	0.00058	0.00002	0.00016	0.00017	—	1.73869	1.73869	0.00011	0.00026	0.00111	1.82045
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13. Integration of Building with Switchyard (2031) - 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	0.12836	0.10670	1.27393	1.14188	0.00240	0.02608	—	0.02608	0.02399	—	0.02399	—	221.779	221.779	0.00900	0.00180	—	222.540
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12836	0.10670	1.27393	1.14188	0.00240	0.02608	—	0.02608	0.02399	—	0.02399	—	221.779	221.779	0.00900	0.00180	—	222.540
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06908	0.05742	0.68558	0.61452	0.00129	0.01403	—	0.01403	0.01291	—	0.01291	—	119.352	119.352	0.00484	0.00097	—	119.762
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01261	0.01048	0.12512	0.11215	0.00024	0.00256	—	0.00256	0.00236	—	0.00236	—	19.7602	19.7602	0.00080	0.00016	—	19.8280
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01024	0.01002	0.00601	0.14162	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	34.1502	34.1502	0.00037	0.00022	0.07771	34.3034
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00928	0.00906	0.00744	0.10388	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	30.3511	30.3511	0.00059	0.00128	0.00201	30.7498
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00503	0.00492	0.00389	0.05731	0.00000	0.00000	0.01783	0.01783	0.00000	0.00417	0.00417	—	16.7596	16.7596	0.00028	0.00012	0.01810	16.8203
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00092	0.00090	0.00071	0.01046	0.00000	0.00000	0.00325	0.00325	0.00000	0.00076	0.00076	—	2.77473	2.77473	0.00005	0.00002	0.00300	2.78479
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.15. Integration of Building with Switchyard (2032) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12756	0.10602	1.27289	1.14116	0.00240	0.02581	—	0.02581	0.02374	—	0.02374	—	221.778	221.778	0.00900	0.00180	—	222.540
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00150	0.00124	0.01495	0.01340	0.00003	0.00030	—	0.00030	0.00028	—	0.00028	—	2.60405	2.60405	0.00011	0.00002	—	2.61299
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00027	0.00023	0.00273	0.00245	0.00001	0.00006	—	0.00006	0.00005	—	0.00005	—	0.43113	0.43113	0.00002	< 0.000005	—	0.43261

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00899	0.00869	0.00737	0.09801	0.00000	0.00000	0.03395	0.03395	0.00000	0.00796	0.00796	—	29.8928	29.8928	0.00052	0.00022	0.00177	29.9738
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00010	0.00010	0.00007	0.00119	0.00000	0.00000	0.00039	0.00039	0.00000	0.00009	0.00009	—	0.36014	0.36014	0.00001	< 0.000005	0.00035	0.36139
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00002	0.00002	0.00001	0.00022	0.00000	0.00000	0.00007	0.00007	0.00000	0.00002	0.00002	—	0.05963	0.05963	< 0.000005	< 0.000005	0.00006	0.05983
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.17. Steel Erection (2031) - 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	0.60279	0.50464	4.03577	5.01644	0.01310	0.10903	—	0.10903	0.10031	—	0.10031	—	1,355.43	1,355.43	0.05498	0.01100	—	1,360.08
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10074	0.08434	0.67447	0.83836	0.00219	0.01822	—	0.01822	0.01676	—	0.01676	—	226.524	226.524	0.00919	0.00184	—	227.301
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01839	0.01539	0.12309	0.15300	0.00040	0.00333	—	0.00333	0.00306	—	0.00306	—	37.5036	37.5036	0.00152	0.00030	—	37.6323
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.04647	0.01570	0.69966	0.31032	0.00388	0.00388	0.14763	0.15151	0.00388	0.04079	0.04467	—	487.183	487.183	0.02945	0.07337	0.72132	510.505
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02792	0.02726	0.02155	0.31783	0.00000	0.00000	0.09885	0.09885	0.00000	0.02313	0.02313	—	92.9393	92.9393	0.00155	0.00066	0.10036	93.2760

Vendor	0.00769	0.00262	0.12321	0.05253	0.00065	0.00065	0.02417	0.02482	0.00065	0.00669	0.00734	—	81.4278	81.4278	0.00492	0.01226	0.05184	85.2567
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00510	0.00497	0.00393	0.05800	0.00000	0.00000	0.01804	0.01804	0.00000	0.00422	0.00422	—	15.3872	15.3872	0.00026	0.00011	0.01662	15.4429
Vendor	0.00140	0.00048	0.02249	0.00959	0.00012	0.00012	0.00441	0.00453	0.00012	0.00122	0.00134	—	13.4813	13.4813	0.00081	0.00203	0.00858	14.1152
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.19. Linear Construction (2031) - 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	0.42843	0.35535	2.82542	2.58828	0.00604	0.11577	—	0.11577	0.10651	—	0.10651	—	502.635	502.635	0.02039	0.00408	—	504.360
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42843	0.35535	2.82542	2.58828	0.00604	0.11577	—	0.11577	0.10651	—	0.10651	—	502.635	502.635	0.02039	0.00408	—	504.360
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.07797	0.06467	0.51422	0.47106	0.00110	0.02107	—	0.02107	0.01938	—	0.01938	—	91.4777	91.4777	0.00371	0.00074	—	91.7916
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01423	0.01180	0.09384	0.08597	0.00020	0.00385	—	0.00385	0.00354	—	0.00354	—	15.1452	15.1452	0.00061	0.00012	—	15.1971
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18294	0.17897	0.10741	2.52888	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	609.825	609.825	0.00661	0.00397	1.38763	612.561
Vendor	0.00465	0.00157	0.06997	0.03103	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	48.7183	48.7183	0.00295	0.00734	0.07213	51.0505
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16574	0.16178	0.13294	1.85493	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	541.984	541.984	0.01058	0.02288	0.03598	549.104
Vendor	0.00456	0.00157	0.07490	0.03187	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	48.7300	48.7300	0.00295	0.00734	0.00186	50.9919
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03041	0.02968	0.02347	0.34611	0.00000	0.00000	0.10765	0.10765	0.00000	0.02519	0.02519	—	101.210	101.210	0.00169	0.00072	0.10929	101.577
Vendor	0.00084	0.00029	0.01342	0.00572	0.00007	0.00007	0.00263	0.00270	0.00007	0.00073	0.00080	—	8.86743	8.86743	0.00054	0.00134	0.00564	9.28439
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00555	0.00542	0.00428	0.06317	0.00000	0.00000	0.01965	0.01965	0.00000	0.00460	0.00460	—	16.7565	16.7565	0.00028	0.00012	0.01809	16.8172

Vendor	0.00015	0.00005	0.00245	0.00104	0.00001	0.00001	0.00048	0.00049	0.00001	0.00013	0.00015	—	1.46810	1.46810	0.00009	0.00022	0.00093	1.53714
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.21. Linear Construction (2032) - 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	0.42438	0.35195	2.78097	2.58314	0.00604	0.11323	—	0.11323	0.10417	—	0.10417	—	502.635	502.635	0.02039	0.00408	—	504.360
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42438	0.35195	2.78097	2.58314	0.00604	0.11323	—	0.11323	0.10417	—	0.10417	—	502.635	502.635	0.02039	0.00408	—	504.360
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15613	0.12949	1.02314	0.95035	0.00222	0.04166	—	0.04166	0.03833	—	0.03833	—	184.922	184.922	0.00750	0.00150	—	185.557
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.02849	0.02363	0.18672	0.17344	0.00041	0.00760	—	0.00760	0.00699	—	0.00699	—	30.6160	30.6160	0.00124	0.00025	—	30.7211
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17368	0.17103	0.08717	2.39819	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	600.564	600.564	0.00661	0.00397	1.22263	603.134
Vendor	0.00417	0.00157	0.06551	0.02987	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	46.9104	46.9104	0.00251	0.00695	0.06103	49.1051
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16045	0.15516	0.13162	1.75016	0.00000	0.00000	0.60621	0.60621	0.00000	0.14209	0.14209	—	533.800	533.800	0.00926	0.00397	0.03165	535.246
Vendor	0.00413	0.00153	0.07014	0.03066	0.00039	0.00039	0.01476	0.01515	0.00039	0.00408	0.00447	—	46.9265	46.9265	0.00251	0.00695	0.00159	49.0617
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05854	0.05708	0.04000	0.66356	0.00000	0.00000	0.21761	0.21761	0.00000	0.05092	0.05092	—	201.507	201.507	0.00292	0.00146	0.19406	202.209
Vendor	0.00153	0.00058	0.02536	0.01112	0.00014	0.00014	0.00532	0.00546	0.00014	0.00147	0.00162	—	17.2612	17.2612	0.00092	0.00256	0.00970	18.0558
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01068	0.01042	0.00730	0.12110	0.00000	0.00000	0.03971	0.03971	0.00000	0.00929	0.00929	—	33.3617	33.3617	0.00048	0.00024	0.03213	33.4780
Vendor	0.00028	0.00011	0.00463	0.00203	0.00003	0.00003	0.00097	0.00100	0.00003	0.00027	0.00029	—	2.85778	2.85778	0.00015	0.00042	0.00161	2.98935
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.23. Paving (2031) - 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	0.74689	0.62759	6.12541	9.88333	0.01395	0.20981	—	0.20981	0.19303	—	0.19303	—	1,510.63	1,510.63	0.06128	0.01226	—	1,515.81
Paving	0.46990	0.46990	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03274	0.02751	0.26851	0.43324	0.00061	0.00920	—	0.00920	0.00846	—	0.00846	—	66.2194	66.2194	0.00269	0.00054	—	66.4466
Paving	0.02060	0.02060	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00598	0.00502	0.04900	0.07907	0.00011	0.00168	—	0.00168	0.00154	—	0.00154	—	10.9634	10.9634	0.00044	0.00009	—	11.0010
Paving	0.00376	0.00376	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04573	0.04474	0.02685	0.63222	0.00000	0.00000	0.15155	0.15155	0.00000	0.03552	0.03552	—	152.456	152.456	0.00165	0.00099	0.34691	153.140

Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00183	0.00179	0.00141	0.02084	0.00000	0.00000	0.00648	0.00648	0.00000	0.00152	0.00152	—	6.09438	6.09438	0.00010	0.00004	0.00658	6.11646
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00033	0.00033	0.00026	0.00380	0.00000	0.00000	0.00118	0.00118	0.00000	0.00028	0.00028	—	1.00899	1.00899	0.00002	0.00001	0.00109	1.01265
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Clearing and Grubbing	Site Preparation	1/1/2030	1/28/2030	5.00000	20.0000	—

Grading, Drainage and Access Road	Grading	1/29/2030	6/18/2030	5.00000	101.000	—
Fencing/Wall	Building Construction	2/19/2030	5/14/2030	5.00000	61.0000	—
Below-Grade Civil	Building Construction	4/1/2030	10/1/2030	5.00000	132.000	—
Control Building Construction	Building Construction	6/18/2030	6/17/2031	5.00000	261.000	—
Integration of Building with Switchyard	Building Construction	4/1/2031	1/6/2032	5.00000	201.000	—
Steel Erection	Building Construction	7/8/2031	9/30/2031	5.00000	61.0000	—
Linear Construction	Building Construction	9/30/2031	7/6/2032	5.00000	201.000	—
Paving	Paving	6/17/2031	7/8/2031	5.00000	16.0000	—

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
Clearing and Grubbing	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Clearing and Grubbing	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading, Drainage and Access Road	Graders	Diesel	Average	2.00000	4.00000	148.000	0.41000
Grading, Drainage and Access Road	Scrapers	Diesel	Average	2.00000	4.00000	423.000	0.48000
Grading, Drainage and Access Road	Plate Compactors	Diesel	Average	2.00000	4.00000	8.00000	0.43000
Grading, Drainage and Access Road	Off-Highway Trucks	Diesel	Average	2.00000	4.00000	376.000	0.38000
Grading, Drainage and Access Road	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	1.20000	84.0000	0.37000
Grading, Drainage and Access Road	Sweepers/Scrubbers	Diesel	Average	1.000000	0.80000	36.0000	0.46000

Grading, Drainage and Access Road	Excavators	Diesel	Average	2.00000	4.00000	172.000	0.38000
Grading, Drainage and Access Road	Crawler Tractors	Diesel	Average	2.00000	4.00000	363.000	0.43000
Fencing/Wall	Skid Steer Loaders	Diesel	Average	3.00000	1.80000	71.0000	0.37000
Fencing/Wall	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	1.20000	107.000	0.37000
Fencing/Wall	Cranes	Diesel	Average	1.000000	1.10000	367.000	0.29000
Below-Grade Civil	Bore/Drill Rigs	Diesel	Average	2.00000	3.60000	83.0000	0.50000
Below-Grade Civil	Off-Highway Trucks	Diesel	Average	3.00000	4.00000	376.000	0.38000
Below-Grade Civil	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	1.20000	84.0000	0.37000
Below-Grade Civil	Generator Sets	Diesel	Average	2.00000	2.40000	20.0000	0.74000
Below-Grade Civil	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Below-Grade Civil	Sweepers/Scrubbers	Diesel	Average	1.000000	1.30000	36.0000	0.46000
Below-Grade Civil	Excavators	Diesel	Average	1.000000	2.40000	172.000	0.38000
Control Building Construction	Cranes	Diesel	Average	1.000000	0.50000	367.000	0.29000
Control Building Construction	Forklifts	Diesel	Average	3.00000	4.60000	82.0000	0.20000
Control Building Construction	Generator Sets	Diesel	Average	1.000000	6.10000	20.0000	0.74000
Control Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	2.70000	84.0000	0.37000
Control Building Construction	Welders	Diesel	Average	1.000000	4.90000	46.0000	0.45000
Integration of Building with Switchyard	Aerial Lifts	Diesel	Average	2.00000	4.00000	46.0000	0.31000
Integration of Building with Switchyard	Generator Sets	Diesel	Average	2.00000	2.00000	20.0000	0.74000
Steel Erection	Cranes	Diesel	Average	1.000000	1.30000	367.000	0.29000
Steel Erection	Aerial Lifts	Diesel	Average	2.00000	6.60000	46.0000	0.31000

Steel Erection	Forklifts	Diesel	Average	1.000000	6.60000	82.0000	0.20000
Steel Erection	Off-Highway Trucks	Diesel	Average	2.00000	2.00000	376.000	0.38000
Steel Erection	Generator Sets	Diesel	Average	1.000000	5.20000	20.0000	0.74000
Steel Erection	Welders	Diesel	Average	1.000000	1.30000	46.0000	0.45000
Steel Erection	Sweepers/Scrubbers	Diesel	Average	1.000000	1.30000	36.0000	0.46000
Linear Construction	Cranes	Diesel	Average	1.000000	0.40000	367.000	0.29000
Linear Construction	Generator Sets	Diesel	Average	2.00000	8.00000	20.0000	0.74000
Linear Construction	Sweepers/Scrubbers	Diesel	Average	1.000000	0.40000	36.0000	0.46000
Linear Construction	Other Construction Equipment	Diesel	Average	1.000000	3.00000	101.000	0.42000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Clearing and Grubbing	Worker	17.5000	14.3000	LDA,LDT1,LDT2
Clearing and Grubbing	Vendor	2.00000	8.80000	HHDT,MHDT
Clearing and Grubbing	Hauling	0.00000	20.0000	HHDT
Clearing and Grubbing	Onsite truck	—	—	HHDT
Grading, Drainage and Access Road	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Grading, Drainage and Access Road	Vendor	2.00000	8.80000	HHDT,MHDT
Grading, Drainage and Access Road	Hauling	73.0198	20.0000	HHDT
Grading, Drainage and Access Road	Onsite truck	—	—	HHDT
Fencing/Wall	Worker	0.00000	14.3000	LDA,LDT1,LDT2
Fencing/Wall	Vendor	10.00000	8.80000	HHDT,MHDT
Fencing/Wall	Hauling	0.00000	20.0000	HHDT

Fencing/Wall	Onsite truck	—	—	HHDT
Below-Grade Civil	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Below-Grade Civil	Vendor	20.0000	8.80000	HHDT,MHDT
Below-Grade Civil	Hauling	0.00000	20.0000	HHDT
Below-Grade Civil	Onsite truck	—	—	HHDT
Control Building Construction	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Control Building Construction	Vendor	1.31120	8.80000	HHDT,MHDT
Control Building Construction	Hauling	0.00000	20.0000	HHDT
Control Building Construction	Onsite truck	—	—	HHDT
Integration of Building with Switchyard	Worker	3.36000	14.3000	LDA,LDT1,LDT2
Integration of Building with Switchyard	Vendor	0.00000	8.80000	HHDT,MHDT
Integration of Building with Switchyard	Hauling	0.00000	20.0000	HHDT
Integration of Building with Switchyard	Onsite truck	—	—	HHDT
Steel Erection	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Steel Erection	Vendor	20.0000	8.80000	HHDT,MHDT
Steel Erection	Hauling	0.00000	20.0000	HHDT
Steel Erection	Onsite truck	—	—	HHDT
Linear Construction	Worker	60.0000	14.3000	LDA,LDT1,LDT2
Linear Construction	Vendor	2.00000	8.80000	HHDT,MHDT
Linear Construction	Hauling	0.00000	20.0000	HHDT
Linear Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	14.3000	LDA,LDT1,LDT2
Paving	Vendor	—	8.80000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

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)
Clearing and Grubbing	—	—	30.0000	0.00000	0.00000
Grading, Drainage and Access Road	59,000.0	—	303.000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	17.9063

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

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	General Light Industry	0.00000	0%
Paving	Other Asphalt Surfaces	2.86961	100%
Paving	Other Non-Asphalt Surfaces	15.0367	0%
Paving	User Defined Recreational	0.00000	0%
Paving	User Defined Industrial	0.00000	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00000	374.840	0.01290	0.00170
2031	0.00000	374.840	0.01290	0.00170
2032	0.00000	374.840	0.01290	0.00170

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. Biomass Cover Type

5.18.1.1. Unmitigated

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)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	21.7600	annual days of extreme heat
Extreme Precipitation	5.50000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	3.74000	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	48.5999
AQ-PM	23.6839
AQ-DPM	22.3149
Drinking Water	78.7811

Lead Risk Housing	41.1720
Pesticides	73.7931
Toxic Releases	30.3326
Traffic	28.4750
Effect Indicators	—
CleanUp Sites	86.5435
Groundwater	88.8594
Haz Waste Facilities/Generators	99.8015
Impaired Water Bodies	51.2180
Solid Waste	99.9084
Sensitive Population	—
Asthma	50.1994
Cardio-vascular	53.9008
Low Birth Weights	36.4126
Socioeconomic Factor Indicators	—
Education	47.5070
Housing	61.9392
Linguistic	43.8760
Poverty	58.5050
Unemployment	62.4024

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	36.84075452
Employed	20.45425382
Median HI	23.26446811

Education	—
Bachelor's or higher	39.34300013
High school enrollment	100
Preschool enrollment	18.64493776
Transportation	—
Auto Access	37.4566919
Active commuting	70.79430258
Social	—
2-parent households	14.75683306
Voting	58.51405107
Neighborhood	—
Alcohol availability	64.62209675
Park access	12.70370846
Retail density	22.81534711
Supermarket access	13.65327858
Tree canopy	2.065956628
Housing	—
Homeownership	60.60567176
Housing habitability	41.69126139
Low-inc homeowner severe housing cost burden	38.58591043
Low-inc renter severe housing cost burden	7.737713332
Uncrowded housing	46.38778391
Health Outcomes	—
Insured adults	43.96253048
Arthritis	0.0
Asthma ER Admissions	49.9
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	16.0
Cognitively Disabled	21.0
Physically Disabled	7.2
Heart Attack ER Admissions	53.7
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	98.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	59.5
Elderly	21.1
English Speaking	31.0
Foreign-born	59.3
Outdoor Workers	28.8
Climate Change Adaptive Capacity	—
Impervious Surface Cover	91.1

Traffic Density	37.8
Traffic Access	23.0
Other Indices	—
Hardship	62.5
Other Decision Support	—
2016 Voting	63.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	70.0000
Healthy Places Index Score for Project Location (b)	29.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

8.1. Justifications

Screen	Justification

Land Use	Land use inputs from RFI.
Construction: Construction Phases	Project-specific construction schedule.
Construction: Off-Road Equipment	Project-specific equipment list.
Construction: Dust From Material Movement	All excavated material reused onsite, import only during grading phase.
Construction: Trips and VMT	Maximum 30 workers, vendor trucks for water trucks and equipment delivery. Haul trucks based on material quantities.
Operations: Fleet Mix	Assume operational trips split 50/50 LHD1 and LHD2.
Operations: Energy Use	Assume negligible energy use associated with lighting for facility. Site would be operated remotely.
Operations: Water and Waste Water	Site would be operated remotely. Assume no water use.
Operations: Solid Waste	Site would be operated remotely. Assume no waste generated.
Operations: Refrigerants	Site would be operated remotely. Assume no refrigerant use.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Building Area	sq. ft	4,000.00	8,000.00
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.00000	1.000000
Landscape Area	sq. ft	—	0.00000
Lot Area	acre	0.00000	4.11000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Paving	Paving	Start Date	12/6/2031	6/17/2031
Paving	Paving	End Date	1/3/2032	7/8/2031

Paving	Paving	Work Days per Phase	20.0000	16.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Grading, Drainage and Access Road	Graders	Number per Day	1.000000	2.00000
Grading, Drainage and Access Road	Graders	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Scrapers	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Plate Compactors	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Off-Highway Trucks	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Tractors/Loaders/Backhoes	Hours Per Day	8.00000	1.20000
Grading, Drainage and Access Road	Sweepers/Scrubbers	Hours Per Day	4.00000	0.80000
Grading, Drainage and Access Road	Excavators	Hours Per Day	8.00000	4.00000
Grading, Drainage and Access Road	Crawler Tractors	Hours Per Day	8.00000	4.00000
Fencing/Wall	Skid Steer Loaders	Hours Per Day	8.00000	1.80000
Fencing/Wall	Tractors/Loaders/Backhoes	Hours Per Day	8.00000	1.20000
Fencing/Wall	Cranes	Hours Per Day	7.00000	1.10000
Below-Grade Civil	Bore/Drill Rigs	Hours Per Day	8.00000	3.60000
Below-Grade Civil	Off-Highway Trucks	Hours Per Day	8.00000	4.00000
Below-Grade Civil	Tractors/Loaders/Backhoes	Hours Per Day	8.00000	1.20000
Below-Grade Civil	Generator Sets	Hours Per Day	8.00000	2.40000
Below-Grade Civil	Sweepers/Scrubbers	Hours Per Day	4.00000	1.30000
Below-Grade Civil	Excavators	Hours Per Day	8.00000	2.40000
Control Building Construction	Cranes	Hours Per Day	7.00000	0.50000
Control Building Construction	Forklifts	Hours Per Day	8.00000	4.60000
Control Building Construction	Generator Sets	Hours Per Day	8.00000	6.10000
Control Building Construction	Generator Sets	Horsepower	14.0000	20.0000
Control Building Construction	Tractors/Loaders/Backhoes	Hours Per Day	7.00000	2.70000
Control Building Construction	Welders	Hours Per Day	8.00000	4.90000

Integration of Building with Switchyard	Aerial Lifts	Number per Day	3.00000	2.00000
Integration of Building with Switchyard	Aerial Lifts	Hours Per Day	8.00000	4.00000
Integration of Building with Switchyard	Aerial Lifts	Horsepower	82.0000	46.0000
Integration of Building with Switchyard	Aerial Lifts	Load Factor	0.20000	0.31000
Integration of Building with Switchyard	Generator Sets	Hours Per Day	8.00000	2.00000
Steel Erection	Cranes	Hours Per Day	7.00000	1.30000
Steel Erection	Aerial Lifts	Hours Per Day	8.00000	6.60000
Steel Erection	Forklifts	Hours Per Day	8.00000	6.60000
Steel Erection	Off-Highway Trucks	Hours Per Day	8.00000	2.00000
Steel Erection	Generator Sets	Hours Per Day	8.00000	5.20000
Steel Erection	Welders	Hours Per Day	8.00000	1.30000
Steel Erection	Sweepers/Scrubbers	Hours Per Day	8.00000	1.30000
Linear Construction	Cranes	Hours Per Day	7.00000	0.40000
Linear Construction	Generator Sets	Number per Day	1.000000	2.00000
Linear Construction	Generator Sets	Horsepower	14.0000	20.0000
Linear Construction	Sweepers/Scrubbers	Hours Per Day	8.00000	0.40000
Linear Construction	Other Construction Equipment	Hours Per Day	6.00000	3.00000

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Grading, Drainage and Access Road	Material Imported	Cubic Yards	—	59,000.0
Grading, Drainage and Access Road	Total Acres Graded	acres	202.000	303.000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Grading, Drainage and Access Road	Worker	One-Way Trips per Day	35.0000	60.0000
Fencing/Wall	Worker	One-Way Trips per Day	3.36000	0.00000
Fencing/Wall	Vendor	One-Way Trips per Day	1.31120	10.00000
Below-Grade Civil	Worker	One-Way Trips per Day	3.36000	60.0000
Below-Grade Civil	Vendor	One-Way Trips per Day	1.31120	20.0000
Control Building Construction	Worker	One-Way Trips per Day	3.36000	60.0000
Integration of Building with Switchyard	Vendor	One-Way Trips per Day	1.31120	0.00000
Steel Erection	Worker	One-Way Trips per Day	3.36000	60.0000
Steel Erection	Vendor	One-Way Trips per Day	1.31120	20.0000
Linear Construction	Worker	One-Way Trips per Day	3.36000	60.0000
Linear Construction	Vendor	One-Way Trips per Day	1.31120	2.00000