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To: Ron Sissem, Project Manager
From: Sally Rideout, Principal Planner
Cc: File
Date: February 6, 2017

Re: ENV 687 Salinas EDE EIR: AQ/GHG Emissions Modeling

Background and Scope of Assessment

The City of Salinas has prepared a comprehensive Economic Development Element (EDE) to the General Plan as a tool to focus and direct its economic development efforts. The purpose of the EDE is to guide future decisions of the City Council and the community in all aspect of City policy and economic development activities. The EDE includes land use policies that focus on revitalization of existing developed areas within the City, developing Carr Lake as a recreation “centerpiece” of the City, and identifying and planning for expanded land capacity at the outer edges of the City that can accommodate/attract large users and clusters of users. Development capacity of the target areas of Carr Lake and areas outside of the City’s Sphere of Influence is the subject of this assessment.

It is assumed that an implementation timeframe of 30-35 years or more will be required to achieve the City’s economic vision. An EIR is being prepared to analyze the physical environmental impacts that would result from implementation of EDE policies and actions.

MEMORANDUM

This assessment provides an estimate of criteria air pollutant and greenhouse gas (GHG) emissions that can be expected to result from the changes in land use that would occur from buildout of the EDE.

Emissions Model

Project-related air and greenhouse gas (GHG) emissions are estimated using California Emissions Estimator Model (CalEEMod) Version 2016.3.1 software. The use of CalEEMod is recommended by the California Air Resources Board (CARB), and accepted by the Monterey Bay Air Resources District (Formerly the Monterey Bay Unified Air Pollution Control District).

The CalEEMod platform calculates emissions from the construction and operations of specific land use projects, but also can be used to provide a general estimate of emissions generated by overall development associated with a general plan or other policy document. The model calculates the daily maximum and annual average for criteria pollutants as well as total annual GHG emissions. The CalEEMod software utilizes USEPA AP-42, CARB vehicle emissions models and additional modeling and studies commissioned by other California agencies such as the California Energy Commission and CalRecycle.

Methodology

This assessment provides an estimate of operational criteria air pollutant and GHG emissions for the proposed project based upon the land use assumptions identified below. Unless otherwise noted, data inputs for the project model are based on the following primary assumptions:

1. Construction GHG emissions estimates may be overly generalized, as construction phasing and equipment needs of site-specific development consistent with the EDE policies are currently unknown and may vary in the future.

2. The model's default PG&E emissions intensity factor is adjusted from the 641 lbs/CO₂/MWh (2008) to 290 lbs/CO₂/MWh (projected 2020), to account for reduced emissions resulting largely from implementation of the Renewable Portfolio Standard and other efficiencies. (http://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf).
3. The model's default operational date of 2045 is used, consistent with the minimum assumed 30-year buildout period identified in the EDE. The model defaults for construction phasing were adjusted to match this assumption.
4. Emissions generated by Industrial land uses are assumed to be generally similar to emissions that would be generated by the CalEEMod default land use subtype "Industrial Park", which would contain a number of industrial or related facilities characterized by a mix of manufacturing, service and warehouse facilities with a wide variation in the proportion of each type of use from one location to another.
5. Emissions from Retail land uses are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "Strip Mall", which would consist of shopping centers containing a variety of specialized retail shops, i.e., quality apparel, hard goods and services such as real estate offices, dance studios, florists and small restaurants.
6. Emissions from Business Park uses are assumed to be similar to emissions that would be generated by the CalEEMod default land use subtype "Office Park", which usually contain general and single use office buildings and support services, such as banks, restaurants and service stations, arranged in a park-or campus-like atmosphere.
6. Future individual development projects, once proposed, will be subject to additional emissions evaluations based on detailed project description information that accompanies their entitlement applications.

MEMORANDUM

7. The baseline for air quality emissions are already quantified in air quality management plans.
8. For GHG emissions, CalEEMod default values for baseline conditions assume new development on vacant sites.

For modeling purposes, data inputs to the model take into account the type and size of proposed uses utilizing CalEEMod default land uses and size metrics. Land use terms are referred to interchangeably in this memorandum.

Operational Emissions Data Inputs

For operational emissions, the model calculates indirect criteria pollutant and GHG emissions from processes “downstream” of the project under evaluation such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Estimates of project energy use, water and wastewater demand, and solid waste generation are derived using the model default values based on the project characteristics. The proposed project land uses and estimated development capacity at EDE buildout are presented in [Table 1, Land Use Categories and Project Characteristics](#).

Results

GHG emissions model results are reported on an annual basis in metric tons of carbon dioxide equivalent (CO₂e). Criteria air pollutant emissions are expressed in pounds per day. All reported emissions results are unmitigated. Detailed modeling results are included as attachments to this assessment.

Table 1 Land Use Categories and Project Characteristics

EDE Land Use	CalEEMod Default Land Use ¹	Acres ²	Building Capacity ³
General Industrial	Industrial Park	115	1,502,820
Retail	Strip Mall	127	1,383,030
Retail (Carr Lake)	Strip Mall	74	810,448
Business Park	Office Park	103	1,570,338

Source: Salinas EDE EIR Section 2 (EMC Planning Group 2016)

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- Note:*
1. CalEEMod default land use subtype. Descriptions of the model default land use categories and subtypes are found in the CalEEMod Version 2016.3.1 User Guide available online at: <http://www.aqmd.gov/caleemod/guide.htm>
 2. Net acreage does not include land deductions for infrastructure, site constraints, etc. Net acres are rounded to the nearest acre
 3. Expressed in units of square feet
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Operational Criteria Pollutant Emissions

The modeling results for unmitigated operational criteria air pollutant emissions are presented in Table 2, **Operational Criteria Air Pollutant Unmitigated Emissions Summary**. Emissions are reported in pounds per day. The model reports winter and summer emissions based on climatic conditions within the air basin. Concentrations of criteria air pollutants are higher during the summer months; therefore, summer emissions estimates only are presented here.

Table 2 Operational Criteria Air Pollutant Unmitigated Emissions Summary

Emissions	Volatile Organic Compounds (ROG)	Nitrogen Oxides (NOx)	PM ₁₀	CO
Summer	308.07	1,498.15	524.22	1,498.15

Source: EMC Planning Group 2017

Greenhouse Gas Emissions

The projected volume of GHG emissions that would be generated by the proposed project is the sum of the operational emissions and amortized construction emissions.

Operational Emissions. Future development within the Target Areas is projected to generate 154,904.63 metric tons CO₂e during operations. The model results are summarized in [Table 3, Unmitigated Operational GHG Emissions \(MT CO₂e per year\)](#).

Table 3 Operational GHG Unmitigated Emissions (MT CO₂e per year)¹

Emissions Source	Bio CO ₂	NBio CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Source	0.0	0.13	<0.01	0.0	0.14
Energy	0.0	14,270.65	1.15	0.29	14,385.12
Mobile Source	0.0	117,063.47	5.03	0.0	117,189.17
Waste	1,142.24	0.0	65.51	0.0	2,829.86
Water	250.35	686.27	25.78	0.62	1,766.32
Total	1,392.59	132,020.52	99.47	0.91	136,170.61

Source: EMC Planning Group 2017

Note: 1. Results may vary due to rounding

Construction Emissions. Construction associated with development of the Target Areas would generate approximately 87,442.71 metric tons CO₂e. Amortized over a 30-year operational lifetime, construction emissions would equate to approximately 2,914.76 metric tons CO₂e per year. This does not include construction emissions associated with development of the new expressways. Expressway construction emissions are estimated separately using RoadMod.

The proposed project is projected to generate approximately 136,170.61 metric tons CO₂e per year during operations. When amortized Target Area construction emissions estimates are included, approximately 139,085.367 metric tons CO₂e per year (2,914.76 + 136,170.61) would be generated.

Sources

1. BREEZE Software. A Division of Trinity Consultants. CalEEMod User's Guide (Version 20163.1). September 2016. Available online at: <http://www.aqmd.gov/caleemod/guide.htm>.
2. MBARD. CEQA Air Quality Guidelines. 2008. Available online at [http://mbard.org/pdf/CEQA_full%20\(1\).pdf](http://mbard.org/pdf/CEQA_full%20(1).pdf)
3. City of Salinas. Salinas General Plan Land Use Element Table LU-2.
4. EMC Planning Group. Salinas EDE Notice of Preparation of an Environmental Impact Report, Figure 5.

Salinas EDE

Monterey Bay Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	1,570.34	1000sqft	103.00	1,570,340.00	0
Industrial Park	1,502.82	1000sqft	115.00	1,502,820.00	0
Strip Mall	1,383.03	1000sqft	127.00	1,383,030.00	0
Strip Mall	810.45	1000sqft	74.00	810,450.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.8	Precipitation Freq (Days)	53
Climate Zone	4			Operational Year	2019
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor changed based on PG&E projections for 2020

Land Use - Includes 74-acre Carr Lake

Construction Phase - Adjusted to meet operational date assumptions

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year	tons/yr											MT/yr						
2017	0.5957	6.1548	2.8662	4.6600e-003	2.4558	0.3384	2.7942	1.3451	0.3113	1.6564	0.0000	432.2043	432.2043	0.1282	0.0000	435.4092		
2018	0.2867	2.9392	2.2495	3.5600e-003	2.4557	0.1590	2.6147	1.3451	0.1463	1.4914	0.0000	324.9527	324.9527	0.0969	0.0000	327.3749		
2019	0.1992	1.9981	1.9921	3.1400e-003	0.0156	0.1078	0.1233	4.1400e-003	0.0991	0.1033	0.0000	282.1117	282.1117	0.0852	0.0000	284.2426		
2020	0.5149	5.6644	3.8338	7.3300e-003	3.3808	0.2487	3.6295	1.3989	0.2288	1.6277	0.0000	644.2943	644.2943	0.2032	0.0000	649.3741		
2021	0.5574	6.0644	4.1141	8.3000e-003	3.3817	0.2593	3.6409	1.3992	0.2385	1.6377	0.0000	729.8369	729.8369	0.2307	0.0000	735.6049		
2022	0.4809	5.0579	3.8521	8.2700e-003	3.3816	0.2127	3.5943	1.3991	0.1957	1.5948	0.0000	726.8996	726.8996	0.2299	0.0000	732.6478		
2023	0.6927	6.8301	5.8916	0.0126	3.4207	0.2937	3.7144	1.4090	0.2713	1.6803	0.0000	1,105.8741	1,105.8741	0.3335	0.0000	1,114.2118		
2024	0.7304	6.9881	6.3265	0.0135	0.0680	0.3010	0.3690	0.0174	0.2781	0.2955	0.0000	1,188.8580	1,188.8580	0.3565	0.0000	1,197.7702		
2025	1.2308	12.2326	11.0424	0.0499	4.4284	0.1579	4.5863	1.1523	0.1471	1.2995	0.0000	4,626.2481	4,626.2481	0.3183	0.0000	4,634.2061		
2026	1.2394	12.6557	11.0408	0.0527	4.8503	0.1491	4.9995	1.2622	0.1391	1.4012	0.0000	4,893.0305	4,893.0305	0.3120	0.0000	4,900.8314		
2027	1.1911	12.4592	10.5778	0.0520	4.8504	0.1477	4.9981	1.2622	0.1377	1.3999	0.0000	4,829.6839	4,829.6839	0.3071	0.0000	4,837.3606		
2028	1.1389	12.2479	10.1431	0.0512	4.8318	0.1457	4.9775	1.2574	0.1359	1.3932	0.0000	4,756.1790	4,756.1790	0.3011	0.0000	4,763.7067		
2029	1.0931	12.1448	9.8036	0.0509	4.8504	0.1450	4.9954	1.2622	0.1352	1.3974	0.0000	4,725.6016	4,725.6016	0.2979	0.0000	4,733.0482		
2030	1.0985	11.2313	9.6484	0.0516	4.8504	0.0828	4.9332	1.2622	0.0816	1.3437	0.0000	4,777.2566	4,777.2566	0.1665	0.0000	4,781.4188		
2031	1.0480	11.1148	9.3346	0.0512	4.8504	0.0817	4.9321	1.2622	0.0805	1.3427	0.0000	4,741.4747	4,741.4747	0.1629	0.0000	4,745.5460		
2032	1.0079	11.0556	9.1013	0.0511	4.8690	0.0811	4.9500	1.2670	0.0799	1.3470	0.0000	4,729.7562	4,729.7562	0.1603	0.0000	4,733.7647		
2033	0.9636	10.8851	8.8078	0.0504	4.8318	0.0796	4.9114	1.2574	0.0785	1.3359	0.0000	4,668.8135	4,668.8135	0.1566	0.0000	4,672.7273		
2034	0.9326	10.8108	8.6002	0.0502	4.8318	0.0788	4.9106	1.2574	0.0778	1.3351	0.0000	4,648.1323	4,648.1323	0.1542	0.0000	4,651.9860		
2035	0.8648	10.3974	8.4435	0.0502	4.8504	0.0522	4.9026	1.2622	0.0512	1.3134	0.0000	4,648.7565	4,648.7565	0.1492	0.0000	4,652.4856		

2036	0.8681	10.4372	8.4758	0.0504	4.8690	0.0524	4.9214	1.2670	0.0514	1.3184	0.0000	4,666.567 9	4,666.5679	0.1497	0.0000	4,670.3112
2037	0.8648	10.3974	8.4435	0.0502	4.8504	0.0522	4.9026	1.2622	0.0512	1.3134	0.0000	4,648.756 5	4,648.7565	0.1492	0.0000	4,652.4856
2038	0.8648	10.3974	8.4435	0.0502	4.8504	0.0522	4.9026	1.2622	0.0512	1.3134	0.0000	4,648.756 5	4,648.7565	0.1492	0.0000	4,652.4856
2039	0.8614	10.3576	8.4111	0.0500	4.8318	0.0520	4.8838	1.2574	0.0510	1.3084	0.0000	4,630.945 2	4,630.9452	0.1486	0.0000	4,634.6600
2040	0.7544	10.0263	7.9015	0.0497	4.8504	0.0384	4.8889	1.2622	0.0376	1.2998	0.0000	4,605.471 7	4,605.4717	0.1420	0.0000	4,609.0213
2041	0.7544	10.0263	7.9015	0.0497	4.8504	0.0384	4.8889	1.2622	0.0376	1.2998	0.0000	4,605.471 7	4,605.4717	0.1420	0.0000	4,609.0213
2042	28.5136	2.1911	3.3397	0.0136	1.2172	0.0297	1.2470	0.3142	0.0295	0.3438	0.0000	1,221.027 0	1,221.0270	0.0373	0.0000	1,221.9589
2043	32.1187	1.1735	2.7473	8.9600e- 003	0.7454	0.0286	0.7740	0.1911	0.0285	0.2196	0.0000	781.4887	781.4887	0.0237	0.0000	782.0807
2044	1.1075	0.0405	0.0947	3.1000e- 004	0.0257	9.9000e- 004	0.0267	6.5900e- 003	9.8000e- 004	7.5700e- 003	0.0000	26.9479	26.9479	8.2000e- 004	0.0000	26.9683
Total	82.5740	233.9793	193.4280	0.9458	102.5457	3.4669	106.0125	30.1677	3.2526	33.4203	0.0000	87,315.39 78	87,315.397	5.0925	0.0000	87,442.709 6

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	24.2369	6.3000e- 004	0.0679	1.0000e- 005		2.4000e- 004	2.4000e- 004		2.4000e- 004	2.4000e- 004	0.0000	0.1307	0.1307	3.5000e- 004	0.0000	0.1396
Energy	0.3411	3.1012	2.6050	0.0186		0.2357	0.2357		0.2357	0.2357	0.0000	14,270.65 23	14,270.652	1.1542	0.2873	14,385.121 8
Mobile	25.4152	177.2013	238.8484	1.2614	79.9221	0.5200	80.4421	22.4855	0.4852	22.9707	0.0000	117,063.4 699	117,063.46	5.0278	0.0000	117,189.16 56
Waste						0.0000	0.0000		0.0000	0.0000	1,142.244 4	0.0000	1,142.2444	67.5047	0.0000	2,829.8621
Water						0.0000	0.0000		0.0000	0.0000	250.3470	686.2682	936.6151	25.7817	0.6213	1,766.3157
Total	49.9932	180.3031	241.5213	1.2800	79.9221	0.7559	80.6780	22.4855	0.7211	23.2067	1,392.591 3	132,020.5 211	133,413.11 24	99.4687	0.9086	136,170.60 48

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/6/2017	2/16/2018	5	270	
2	Paving	Paving	2/1/2018	3/11/2020	5	550	
3	Grading	Grading	3/12/2020	3/1/2023	5	775	
4	Demolition	Demolition	3/2/2023	1/29/2025	5	500	
5	Building Construction	Building Construction	2/1/2025	2/11/2042	5	4442	
6	Architectural Coating	Architectural Coating	2/12/2042	1/13/2044	5	501	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1937.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,899,960; Non-Residential Outdoor: 2,633,320; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Pavers	2	8.00	130	0.42
Building Construction	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Demolition	Graders	1	8.00	187	0.41
Demolition	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Paving Equipment	2	8.00	132	0.36
Architectural Coating	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Architectural Coating	Rubber Tired Dozers	3	8.00	247	0.40
Demolition	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	8	367.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	1,836.00	863.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	14	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	14	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	15	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	8	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					2.4389	0.0000	2.4389	1.3406	0.0000	1.3406	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.5829	6.1424	2.7560	4.4700e-003		0.3382	0.3382		0.3112	0.3112	0.0000	415.1791	415.1791	0.1272	0.0000	418.3594	
Total	0.5829	6.1424	2.7560	4.4700e-003	2.4389	0.3382	2.7772	1.3406	0.3112	1.6518	0.0000	415.1791	415.1791	0.1272	0.0000	418.3594	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0128	0.0124	0.1102	1.9000e-004	0.0168	1.7000e-004	0.0170	4.4700e-003	1.5000e-004	4.6300e-003	0.0000	17.0252	17.0252	9.8000e-004	0.0000	17.0498	
Total	0.0128	0.0124	0.1102	1.9000e-004	0.0168	1.7000e-004	0.0170	4.4700e-003	1.5000e-004	4.6300e-003	0.0000	17.0252	17.0252	9.8000e-004	0.0000	17.0498	

3.2 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					2.4389	0.0000	2.4389	1.3406	0.0000	1.3406	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0799	0.8435	0.3933	6.7000e-004		0.0451	0.0451		0.0415	0.0415	0.0000	60.8298	60.8298	0.0189	0.0000	61.3033	
Total	0.0799	0.8435	0.3933	6.7000e-004	2.4389	0.0451	2.4840	1.3406	0.0415	1.3821	0.0000	60.8298	60.8298	0.0189	0.0000	61.3033	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.6800e-003	1.6100e-003	0.0143	3.0000e-005	2.5100e-003	2.0000e-005	2.5300e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4697	2.4697	1.3000e-004	0.0000	2.4729	
Total	1.6800e-003	1.6100e-003	0.0143	3.0000e-005	2.5100e-003	2.0000e-005	2.5300e-003	6.7000e-004	2.0000e-005	6.9000e-004	0.0000	2.4697	2.4697	1.3000e-004	0.0000	2.4729	

3.3 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					

Off-Road	0.1956	2.0850	1.7608	2.7100e-003		0.1138	0.1138		0.1047	0.1047	0.0000	247.6583	247.6583	0.0771	0.0000	249.5858
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1956	2.0850	1.7608	2.7100e-003		0.1138	0.1138		0.1047	0.1047	0.0000	247.6583	247.6583	0.0771	0.0000	249.5858

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5300e-003	9.1300e-003	0.0811	1.6000e-004	0.0142	1.3000e-004	0.0143	3.7800e-003	1.2000e-004	3.9000e-003	0.0000	13.9949	13.9949	7.2000e-004	0.0000	14.0129
Total	9.5300e-003	9.1300e-003	0.0811	1.6000e-004	0.0142	1.3000e-004	0.0143	3.7800e-003	1.2000e-004	3.9000e-003	0.0000	13.9949	13.9949	7.2000e-004	0.0000	14.0129

3.3 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1898	1.9894	1.9138	2.9800e-003		0.1076	0.1076		0.0990	0.0990	0.0000	267.2011	267.2011	0.0845	0.0000	269.3146
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.1898	1.9894	1.9138	2.9800e-003		0.1076	0.1076		0.0990	0.0990	0.0000	267.2011	267.2011	0.0845	0.0000	269.3146

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.3700e-003	8.7900e-003	0.0784	1.7000e-004	0.0156	1.4000e-004	0.0157	4.1400e-003	1.3000e-004	4.2700e-003	0.0000	14.9106	14.9106	7.0000e-004	0.0000	14.9280	
Total	9.3700e-003	8.7900e-003	0.0784	1.7000e-004	0.0156	1.4000e-004	0.0157	4.1400e-003	1.3000e-004	4.2700e-003	0.0000	14.9106	14.9106	7.0000e-004	0.0000	14.9280	

3.3 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0346	0.3587	0.3736	5.8000e-004		0.0192	0.0192		0.0177	0.0177	0.0000	51.0720	51.0720	0.0165	0.0000	51.4849
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0346	0.3587	0.3736	5.8000e-004		0.0192	0.0192		0.0177	0.0177	0.0000	51.0720	51.0720	0.0165	0.0000	51.4849

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6600e-003	1.5200e-003	0.0136	3.0000e-005	3.0400e-003	3.0000e-005	3.0700e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.8257	2.8257	1.2000e-004	0.0000	2.8286
Total	1.6600e-003	1.5200e-003	0.0136	3.0000e-005	3.0400e-003	3.0000e-005	3.0700e-003	8.1000e-004	2.0000e-005	8.3000e-004	0.0000	2.8257	2.8257	1.2000e-004	0.0000	2.8286

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3609	0.0000	3.3609	1.3936	0.0000	1.3936	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4695	5.2958	3.3716	6.5400e-003		0.2294	0.2294		0.2110	0.2110	0.0000	574.8093	574.8093	0.1859	0.0000	579.4569
Total	0.4695	5.2958	3.3716	6.5400e-003	3.3609	0.2294	3.5903	1.3936	0.2110	1.6046	0.0000	574.8093	574.8093	0.1859	0.0000	579.4569

Unmitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.1600e-003	8.3700e-003	0.0750	1.7000e-004	0.0168	1.4000e-004	0.0169	4.4600e-003	1.3000e-004	4.6000e-003	0.0000	15.5874	15.5874	6.5000e-004	0.0000	15.6036	
Total	9.1600e-003	8.3700e-003	0.0750	1.7000e-004	0.0168	1.4000e-004	0.0169	4.4600e-003	1.3000e-004	4.6000e-003	0.0000	15.5874	15.5874	6.5000e-004	0.0000	15.6036	

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3609	0.0000	3.3609	1.3936	0.0000	1.3936	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5470	6.0552	4.0296	8.0900e-003		0.2591	0.2591		0.2384	0.2384	0.0000	711.1595	711.1595	0.2300	0.0000	716.9096
Total	0.5470	6.0552	4.0296	8.0900e-003	3.3609	0.2591	3.6200	1.3936	0.2384	1.6320	0.0000	711.1595	711.1595	0.2300	0.0000	716.9096

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0105	9.2400e-003	0.0844	2.1000e-004	0.0208	1.7000e-004	0.0209	5.5200e-003	1.6000e-004	5.6800e-003	0.0000	18.6773	18.6773	7.2000e-004	0.0000	18.6953
Total	0.0105	9.2400e-003	0.0844	2.1000e-004	0.0208	1.7000e-004	0.0209	5.5200e-003	1.6000e-004	5.6800e-003	0.0000	18.6773	18.6773	7.2000e-004	0.0000	18.6953

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.3609	0.0000	3.3609	1.3936	0.0000	1.3936	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	
Total	0.4712	5.0497	3.7754	8.0700e-003	3.3609	0.2125	3.5735	1.3936	0.1955	1.5892	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	9.6900e-003	8.2400e-003	0.0767	2.0000e-004	0.0207	1.7000e-004	0.0209	5.5000e-003	1.5000e-004	5.6500e-003	0.0000	17.9498	17.9498	6.4000e-004	0.0000	17.9658	
Total	9.6900e-003	8.2400e-003	0.0767	2.0000e-004	0.0207	1.7000e-004	0.0209	5.5000e-003	1.5000e-004	5.6500e-003	0.0000	17.9498	17.9498	6.4000e-004	0.0000	17.9658	

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.3609	0.0000	3.3609	1.3936	0.0000	1.3936	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0714	0.7421	0.6031	1.3300e-003		0.0306	0.0306		0.0282	0.0282	0.0000	117.2507	117.2507	0.0379	0.0000	118.1987
Total	0.0714	0.7421	0.6031	1.3300e-003	3.3609	0.0306	3.3916	1.3936	0.0282	1.4218	0.0000	117.2507	117.2507	0.0379	0.0000	118.1987

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4900e-003	1.2200e-003	0.0116	3.0000e-005	3.4200e-003	3.0000e-005	3.4500e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.8585	2.8585	9.0000e-005	0.0000	2.8608
Total	1.4900e-003	1.2200e-003	0.0116	3.0000e-005	3.4200e-003	3.0000e-005	3.4500e-003	9.1000e-004	2.0000e-005	9.3000e-004	0.0000	2.8585	2.8585	9.0000e-005	0.0000	2.8608

3.5 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Off-Road	0.6066	6.0760	5.1749	0.0110		0.2628	0.2628		0.2429	0.2429	0.0000	960.5209	960.5209	0.2947	0.0000
Total	0.6066	6.0760	5.1749	0.0110		0.2628	0.2628		0.2429	0.2429	0.0000	960.5209	960.5209	0.2947	0.0000	967.8874

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	0.0108	0.1021	2.8000e-004	0.0563	2.4000e-004	0.0566	0.0145	2.2000e-004	0.0147	0.0000	25.2441	25.2441	8.3000e-004	0.0000	25.2649
Total	0.0132	0.0108	0.1021	2.8000e-004	0.0563	2.4000e-004	0.0566	0.0145	2.2000e-004	0.0147	0.0000	25.2441	25.2441	8.3000e-004	0.0000	25.2649

3.5 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.7155	6.9764	6.2134	0.0132		0.3007	0.3007		0.2778	0.2778	0.0000	1,159.5540	1,159.5540	0.3556	0.0000	1,168.4437
Total	0.7155	6.9764	6.2134	0.0132		0.3007	0.3007		0.2778	0.2778	0.0000	1,159.5540	1,159.5540	0.3556	0.0000	1,168.4437

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0149	0.0117	0.1131	3.2000e-004	0.0680	2.8000e-004	0.0683	0.0174	2.5000e-004	0.0177	0.0000	29.3040	29.3040	9.0000e-004	0.0000	29.3265
Total	0.0149	0.0117	0.1131	3.2000e-004	0.0680	2.8000e-004	0.0683	0.0174	2.5000e-004	0.0177	0.0000	29.3040	29.3040	9.0000e-004	0.0000	29.3265

3.5 Demolition - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0524	0.4950	0.4804	1.0600e-003		0.0208	0.0208		0.0192	0.0192	0.0000	92.9291	92.9291	0.0285	0.0000	93.6410
Total	0.0524	0.4950	0.4804	1.0600e-003		0.0208	0.0208		0.0192	0.0192	0.0000	92.9291	92.9291	0.0285	0.0000	93.6410

Unmitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1200e-003	8.5000e-004	8.3400e-003	2.0000e-005	5.4500e-003	2.0000e-005	5.4700e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	2.2556	2.2556	7.0000e-005	0.0000	2.2572	
Total	1.1200e-003	8.5000e-004	8.3400e-003	2.0000e-005	5.4500e-003	2.0000e-005	5.4700e-003	1.4000e-003	2.0000e-005	1.4200e-003	0.0000	2.2556	2.2556	7.0000e-005	0.0000	2.2572	

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2716	2.5051	3.6489	5.9200e-003		0.1126	0.1126		0.1049	0.1049	0.0000	514.2133	514.2133	0.1419	0.0000	517.7614
Total	0.2716	2.5051	3.6489	5.9200e-003		0.1126	0.1126		0.1049	0.1049	0.0000	514.2133	514.2133	0.1419	0.0000	517.7614

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2358	8.7232	1.9033	0.0280	1.1550	0.0115	1.1666	0.3130	0.0110	0.3240	0.0000	2,664.9399	2,664.9399	0.1089	0.0000	2,667.6616
Worker	0.6698	0.5085	5.0016	0.0150	3.2679	0.0130	3.2808	0.8379	0.0120	0.8499	0.0000	1,351.9103	1,351.9103	0.0390	0.0000	1,352.8850
Total	0.9057	9.2317	6.9049	0.0429	4.4229	0.0245	4.4474	1.1509	0.0230	1.1739	0.0000	4,016.8502	4,016.8502	0.1479	0.0000	4,020.5466

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971	
Total	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2491	9.4025	1.9874	0.0305	1.2667	0.0120	1.2787	0.3433	0.0115	0.3547	0.0000	2,905.9363	2,905.9363	0.1180	0.0000	2,908.8850	
Worker	0.6925	0.5061	5.0520	0.0157	3.5837	0.0137	3.5973	0.9189	0.0126	0.9315	0.0000	1,423.1880	1,423.1880	0.0385	0.0000	1,424.1493	
Total	0.9416	9.9085	7.0394	0.0462	4.8504	0.0257	4.8760	1.2622	0.0241	1.2862	0.0000	4,329.1243	4,329.1243	0.1564	0.0000	4,333.0343	

3.6 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					

Off-Road	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971
Total	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2408	9.2524	1.9014	0.0303	1.2667	0.0114	1.2781	0.3433	0.0109	0.3542	0.0000	2,891.5975	2,891.5975	0.1167	0.0000	2,894.5142
Worker	0.6524	0.4595	4.6749	0.0152	3.5837	0.0129	3.5965	0.9189	0.0118	0.9307	0.0000	1,374.1802	1,374.1802	0.0348	0.0000	1,375.0492
Total	0.8932	9.7120	6.5763	0.0455	4.8504	0.0242	4.8746	1.2622	0.0227	1.2849	0.0000	4,265.7777	4,265.7777	0.1514	0.0000	4,269.5635

3.6 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Off-Road	0.2967	2.7367	3.9861	6.4700e-003		0.1230	0.1230		0.1146	0.1146	0.0000	561.7456	561.7456	0.1550	0.0000	565.6217
Total	0.2967	2.7367	3.9861	6.4700e-003		0.1230	0.1230		0.1146	0.1146	0.0000	561.7456	561.7456	0.1550	0.0000	565.6217

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2331	9.0944	1.8290	0.0301	1.2618	0.0108	1.2727	0.3420	0.0103	0.3523	0.0000	2,868.8530	2,868.8530	0.1146	0.0000	2,871.7181	
Worker	0.6090	0.4168	4.3280	0.0147	3.5699	0.0119	3.5819	0.9154	0.0110	0.9264	0.0000	1,325.5804	1,325.5804	0.0315	0.0000	1,326.3670	
Total	0.8421	9.5112	6.1569	0.0447	4.8318	0.0227	4.8545	1.2573	0.0213	1.2787	0.0000	4,194.4334	4,194.4334	0.1461	0.0000	4,198.0850	

3.6 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971	
Total	0.2979	2.7472	4.0015	6.4900e-003		0.1235	0.1235		0.1150	0.1150	0.0000	563.9062	563.9062	0.1556	0.0000	567.7971	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2281	9.0177	1.7777	0.0301	1.2667	0.0104	1.2771	0.3433	9.9300e-003	0.3532	0.0000	2,869.6486	2,869.6486	0.1137	0.0000	2,872.4920	
Worker	0.5672	0.3798	4.0244	0.0143	3.5837	0.0111	3.5948	0.9189	0.0103	0.9292	0.0000	1,292.0468	1,292.0468	0.0285	0.0000	1,292.7591	

Total	0.7952	9.3976	5.8021	0.0444	4.8504	0.0215	4.8719	1.2622	0.0202	1.2824	0.0000	4,161.695 4	4,161.6954	0.1422	0.0000	4,165.2511
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3.6 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3515	1.9647	4.1769	7.7000e-003		0.0625	0.0625		0.0625	0.0625	0.0000	657.5323	657.5323	0.0285	0.0000	658.2449
Total	0.3515	1.9647	4.1769	7.7000e-003		0.0625	0.0625		0.0625	0.0625	0.0000	657.5323	657.5323	0.0285	0.0000	658.2449

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2233	8.9223	1.7337	0.0300	1.2667	9.9800e-003	1.2767	0.3433	9.5400e-003	0.3528	0.0000	2,861.850 7	2,861.8507	0.1123	0.0000	2,864.6570
Worker	0.5237	0.3443	3.7378	0.0139	3.5837	0.0104	3.5940	0.9189	9.5300e-003	0.9284	0.0000	1,257.873 7	1,257.8737	0.0257	0.0000	1,258.5168
Total	0.7470	9.2666	5.4716	0.0439	4.8504	0.0203	4.8707	1.2622	0.0191	1.2813	0.0000	4,119.724 3	4,119.7243	0.1380	0.0000	4,123.1738

3.6 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3515	1.9647	4.1769	7.7000e-003		0.0625	0.0625		0.0625	0.0625	0.0000	657.5323	657.5323	0.0285	0.0000	658.2449	
Total	0.3515	1.9647	4.1769	7.7000e-003		0.0625	0.0625		0.0625	0.0625	0.0000	657.5323	657.5323	0.0285	0.0000	658.2449	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2192	8.8398	1.6962	0.0300	1.2667	9.6100e-003	1.2763	0.3433	9.1800e-003	0.3525	0.0000	2,856.2147	2,856.2147	0.1113	0.0000	2,858.9963	
Worker	0.4773	0.3104	3.4616	0.0136	3.5837	9.6400e-003	3.5933	0.9189	8.8700e-003	0.9278	0.0000	1,227.7277	1,227.7277	0.0231	0.0000	1,228.3048	
Total	0.6965	9.1501	5.1578	0.0435	4.8504	0.0193	4.8696	1.2622	0.0181	1.2802	0.0000	4,083.9424	4,083.9424	0.1343	0.0000	4,087.3011	

3.6 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3529	1.9722	4.1929	7.7300e-003		0.0627	0.0627		0.0627	0.0627	0.0000	660.0516	660.0516	0.0286	0.0000	660.7669	
Total	0.3529	1.9722	4.1929	7.7300e-003		0.0627	0.0627		0.0627	0.0627	0.0000	660.0516	660.0516	0.0286	0.0000	660.7669	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2168	8.8012	1.6744	0.0300	1.2716	9.3200e-003	1.2809	0.3446	8.9100e-003	0.3535	0.0000	2,863.7954	2,863.7954	0.1109	0.0000	2,866.5666	
Worker	0.4383	0.2822	3.2341	0.0133	3.5974	9.0200e-003	3.6064	0.9224	8.3000e-003	0.9307	0.0000	1,205.9093	1,205.9093	0.0209	0.0000	1,206.4312	
Total	0.6551	9.0834	4.9085	0.0434	4.8690	0.0183	4.8873	1.2670	0.0172	1.2842	0.0000	4,069.7047	4,069.7047	0.1317	0.0000	4,072.9978	

3.6 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3502	1.9571	4.1609	7.6700e-003		0.0622	0.0622		0.0622	0.0622	0.0000	655.0130	655.0130	0.0284	0.0000	655.7229
Total	0.3502	1.9571	4.1609	7.6700e-003		0.0622	0.0622		0.0622	0.0622	0.0000	655.0130	655.0130	0.0284	0.0000	655.7229

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2126	8.6722	1.6392	0.0298	1.2619	8.9700e-003	1.2709	0.3420	8.5800e-003	0.3506	0.0000	2,840.014	2,840.0143	0.1094	0.0000	2,842.7484	
Worker	0.4009	0.2558	3.0077	0.0130	3.5699	8.3700e-003	3.5783	0.9154	7.7000e-003	0.9231	0.0000	1,173.786	1,173.7862	0.0188	0.0000	1,174.2560	
Total	0.6134	8.9280	4.6469	0.0427	4.8318	0.0173	4.8492	1.2574	0.0163	1.2736	0.0000	4,013.800	4,013.8005	0.1282	0.0000	4,017.0044	

3.6 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3502	1.9571	4.1609	7.6700e-003		0.0622	0.0622		0.0622	0.0622	0.0000	655.0130	655.0130	0.0284	0.0000	655.7229
Total	0.3502	1.9571	4.1609	7.6700e-003		0.0622	0.0622		0.0622	0.0622	0.0000	655.0130	655.0130	0.0284	0.0000	655.7229

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2103	8.6181	1.6189	0.0298	1.2619	8.7100e-003	1.2706	0.3420	8.3300e-003	0.3503	0.0000	2,839.307	2,839.3074	0.1087	0.0000	2,842.0258
Worker	0.3721	0.2356	2.8204	0.0127	3.5699	7.8300e-003	3.5778	0.9154	7.2000e-003	0.9226	0.0000	1,153.811	1,153.8119	0.0170	0.0000	1,154.2373
Total	0.5824	8.8537	4.4394	0.0425	4.8318	0.0165	4.8484	1.2574	0.0155	1.2729	0.0000	3,993.119	3,993.1193	0.1258	0.0000	3,996.2630

3.6 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543	
Total	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2091	8.6061	1.6076	0.0299	1.2668	8.5300e-003	1.2753	0.3433	8.1600e-003	0.3515	0.0000	2,850.224	2,850.2240	0.1088	0.0000	2,852.9429	
Worker	0.3480	0.2204	2.6679	0.0126	3.5837	7.3600e-003	3.5910	0.9189	6.7700e-003	0.9257	0.0000	1,141.0002	1,141.0002	0.0155	0.0000	1,141.3885	
Total	0.5571	8.8265	4.2756	0.0425	4.8504	0.0159	4.8663	1.2622	0.0149	1.2771	0.0000	3,991.2242	3,991.2242	0.1243	0.0000	3,994.3313	

3.6 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr					
	Off-Road	0.3088	1.5769	4.1839	7.7300e-003		0.0364	0.0364		0.0364	0.0364	0.0000	660.0516	660.0516	0.0250	0.0000	660.6760	
Total	0.3088	1.5769	4.1839	7.7300e-003		0.0364	0.0364		0.0364	0.0364	0.0000	660.0516	660.0516	0.0250	0.0000	660.6760		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2099	8.6391	1.6138	0.0300	1.2716	8.5700e-003	1.2802	0.3446	8.1900e-003	0.3528	0.0000	2,861.144	2,861.1444	0.1092	0.0000	2,863.8737		
Worker	0.3494	0.2213	2.6782	0.0126	3.5974	7.3900e-003	3.6048	0.9224	6.8000e-003	0.9292	0.0000	1,145.371	1,145.3719	0.0156	0.0000	1,145.7616		
Total	0.5593	8.8603	4.2919	0.0426	4.8690	0.0160	4.8850	1.2670	0.0150	1.2820	0.0000	4,006.516	4,006.5163	0.1248	0.0000	4,009.6353		

3.6 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr												MT/yr					
Off-Road	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543		
Total	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2091	8.6061	1.6076	0.0299	1.2668	8.5300e-003	1.2753	0.3433	8.1600e-003	0.3515	0.0000	2,850.2240	2,850.2240	0.1088	0.0000	2,852.9429
Worker	0.3480	0.2204	2.6679	0.0126	3.5837	7.3600e-003	3.5910	0.9189	6.7700e-003	0.9257	0.0000	1,141.0002	1,141.0002	0.0155	0.0000	1,141.3885
Total	0.5571	8.8265	4.2756	0.0425	4.8504	0.0159	4.8663	1.2622	0.0149	1.2771	0.0000	3,991.2242	3,991.2242	0.1243	0.0000	3,994.3313

3.6 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543
Total	0.3076	1.5709	4.1679	7.7000e-003		0.0363	0.0363		0.0363	0.0363	0.0000	657.5323	657.5323	0.0249	0.0000	658.1543

Unmitigated Construction Off-Site

Vendor	0.2091	8.6061	1.6076	0.0299	1.2668	8.5300e-003	1.2753	0.3433	8.1600e-003	0.3515	0.0000	2,850.2240	2,850.2240	0.1088	0.0000	2,852.9429
Worker	0.3480	0.2204	2.6679	0.0126	3.5837	7.3600e-003	3.5910	0.9189	6.7700e-003	0.9257	0.0000	1,141.0002	1,141.0002	0.0155	0.0000	1,141.3885
Total	0.5571	8.8265	4.2756	0.0425	4.8504	0.0159	4.8663	1.2622	0.0149	1.2771	0.0000	3,991.2242	3,991.2242	0.1243	0.0000	3,994.3313

3.6 Building Construction - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Off-Road	0.3065	1.5649	4.1520	7.6700e-003		0.0361	0.0361		0.0361	0.0361	0.0000	655.0130	655.0130	0.0248	0.0000	655.6326
Total	0.3065	1.5649	4.1520	7.6700e-003		0.0361	0.0361		0.0361	0.0361	0.0000	655.0130	655.0130	0.0248	0.0000	655.6326

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr											MT/yr				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2083	8.5731	1.6015	0.0298	1.2619	8.5000e-003	1.2704	0.3420	8.1300e-003	0.3501	0.0000	2,839.3036	2,839.3036	0.1083	0.0000	2,842.0120
Worker	0.3467	0.2196	2.6577	0.0126	3.5699	7.3300e-003	3.5773	0.9154	6.7500e-003	0.9221	0.0000	1,136.6286	1,136.6286	0.0155	0.0000	1,137.0153
Total	0.5550	8.7927	4.2592	0.0423	4.8318	0.0158	4.8477	1.2574	0.0149	1.2722	0.0000	3,975.9322	3,975.9322	0.1238	0.0000	3,979.0274

3.6 Building Construction - 2040

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2882	1.3764	4.1677	7.7000e-003		0.0248	0.0248		0.0248	0.0248	0.0000	657.5323	657.5323	0.0229	0.0000	658.1048	
Total	0.2882	1.3764	4.1677	7.7000e-003		0.0248	0.0248		0.0248	0.0248	0.0000	657.5323	657.5323	0.0229	0.0000	658.1048	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2038	8.4798	1.5505	0.0300	1.2668	7.9600e-003	1.2747	0.3433	7.6000e-003	0.3509	0.0000	2,860.856	2,860.8564	0.1081	0.0000	2,863.5576	
Worker	0.2624	0.1701	2.1834	0.0120	3.5837	5.6700e-003	3.5894	0.9189	5.2200e-003	0.9241	0.0000	1,087.083	1,087.0830	0.0110	0.0000	1,087.3589	
Total	0.4662	8.6499	3.7339	0.0420	4.8504	0.0136	4.8641	1.2622	0.0128	1.2750	0.0000	3,947.939	3,947.9394	0.1191	0.0000	3,950.9165	

3.6 Building Construction - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					

Off-Road	0.2882	1.3764	4.1677	7.7000e-003		0.0248	0.0248		0.0248	0.0248	0.0000	657.5323	657.5323	0.0229	0.0000	658.1048
Total	0.2882	1.3764	4.1677	7.7000e-003		0.0248	0.0248		0.0248	0.0248	0.0000	657.5323	657.5323	0.0229	0.0000	658.1048

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2038	8.4798	1.5505	0.0300	1.2668	7.9600e-003	1.2747	0.3433	7.6000e-003	0.3509	0.0000	2,860.856	2,860.8564	0.1081	0.0000	2,863.5576
Worker	0.2624	0.1701	2.1834	0.0120	3.5837	5.6700e-003	3.5894	0.9189	5.2200e-003	0.9241	0.0000	1,087.083	1,087.0830	0.0110	0.0000	1,087.3589
Total	0.4662	8.6499	3.7339	0.0420	4.8504	0.0136	4.8641	1.2622	0.0128	1.2750	0.0000	3,947.939	3,947.9394	0.1191	0.0000	3,950.9165

3.6 Building Construction - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0331	0.1582	0.4790	8.9000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	75.5784	75.5784	2.6300e-003	0.0000	75.6442
Total	0.0331	0.1582	0.4790	8.9000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003	0.0000	75.5784	75.5784	2.6300e-003	0.0000	75.6442

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0234	0.9747	0.1782	3.4500e-003	0.1456	9.1000e-004	0.1465	0.0395	8.7000e-004	0.0403	0.0000	328.8341	328.8341	0.0124	0.0000	329.1446
Worker	0.0302	0.0196	0.2510	1.3800e-003	0.4119	6.5000e-004	0.4126	0.1056	6.0000e-004	0.1062	0.0000	124.9521	124.9521	1.2700e-003	0.0000	124.9838
Total	0.0536	0.9942	0.4292	4.8300e-003	0.5575	1.5600e-003	0.5591	0.1451	1.4700e-003	0.1466	0.0000	453.7861	453.7861	0.0137	0.0000	454.1283

3.7 Architectural Coating - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	28.1383				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2403	1.0073	2.0296	5.7200e-003	0.0243	0.0243		0.0243	0.0243	0.0000	491.5434	491.5434	0.0189	0.0000	492.0165	
Total	28.3786	1.0073	2.0296	5.7200e-003	0.0243	0.0243		0.0243	0.0243	0.0000	491.5434	491.5434	0.0189	0.0000		492.0165

Unmitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0483	0.0313	0.4019	2.2100e-003	0.6597	1.0400e-003	0.6608	0.1692	9.6000e-004	0.1701	0.0000	200.1191	200.1191	2.0300e-003	0.0000	200.1699	
Total	0.0483	0.0313	0.4019	2.2100e-003	0.6597	1.0400e-003	0.6608	0.1692	9.6000e-004	0.1701	0.0000	200.1191	200.1191	2.0300e-003	0.0000	200.1699	

3.7 Architectural Coating - 2043

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	31.7926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2715	1.1381	2.2931	6.4600e-003		0.0274	0.0274		0.0274	0.0274	0.0000	555.3802	555.3802	0.0214	0.0000	555.9147
Total	32.0641	1.1381	2.2931	6.4600e-003		0.0274	0.0274		0.0274	0.0274	0.0000	555.3802	555.3802	0.0214	0.0000	555.9147

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0546	0.0354	0.4541	2.4900e-003	0.7454	1.1800e-003	0.7466	0.1911	1.0900e-003	0.1922	0.0000	226.1086	226.1086	2.3000e-003	0.0000	226.1660
Total	0.0546	0.0354	0.4541	2.4900e-003	0.7454	1.1800e-003	0.7466	0.1911	1.0900e-003	0.1922	0.0000	226.1086	226.1086	2.3000e-003	0.0000	226.1660

3.7 Architectural Coating - 2044

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0963					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3600e-003	0.0393	0.0791	2.2000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	19.1510	19.1510	7.4000e-004	0.0000	19.1695
Total	1.1057	0.0393	0.0791	2.2000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	19.1510	19.1510	7.4000e-004	0.0000	19.1695

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.2200e-003	0.0157	9.0000e-005	0.0257	4.0000e-005	0.0257	6.5900e-003	4.0000e-005	6.6300e-003	0.0000	7.7969	7.7969	8.0000e-005	0.0000	7.7988
Total	1.8800e-003	1.2200e-003	0.0157	9.0000e-005	0.0257	4.0000e-005	0.0257	6.5900e-003	4.0000e-005	6.6300e-003	0.0000	7.7969	7.7969	8.0000e-005	0.0000	7.7988

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr												MT/yr					
	Unmitigated	25.4152	177.2013	238.8484	1.2614	79.9221	0.5200	80.4421	22.4855	0.4852	22.9707	0.0000	117,063.4 699	117,063.46 99	5.0278	0.0000	117,189.16 56	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Industrial Park	10,264.26	3,742.02	1097.06	21,034,698		21,034,698	
Office Park	17,933.28	2,575.36	1193.46	33,453,114		33,453,114	
Strip Mall	61,295.89	58,142.58	28255.30	86,434,867		86,434,867	
Strip Mall	35,919.14	34,071.32	16557.49	50,650,484		50,650,484	
Total	125,412.58	98,531.28	47,103.31	191,573,163		191,573,163	

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.574379	0.023370	0.208760	0.099262	0.008961	0.003678	0.020994	0.048162	0.003263	0.001590	0.006076	0.001035	0.000470

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					

Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	10,894.61 83	10,894.618 3	1.0895	0.2254	10,989.025 8
NaturalGas Unmitigated	0.3411	3.1012	2.6050	0.0186		0.2357	0.2357		0.2357	0.2357	0.0000	3,376.033 9	3,376.0339	0.0647	0.0619	3,396.0960

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Office Park	3.33226e+007	0.1797	1.6335	1.3721	9.8000e-003		0.1241	0.1241		0.1241	0.1241	0.0000	1,778.2216 6	1,778.221	0.0341	0.0326	1,788.7887
Strip Mall	1.92887e+006	0.0104	0.0946	0.0794	5.7000e-004		7.1900e-003	7.1900e-003		7.1900e-003	7.1900e-003	0.0000	102.9319	102.9319	1.9700e-003	1.8900e-003	103.5436
Strip Mall	3.29161e+006	0.0178	0.1614	0.1355	9.7000e-004		0.0123	0.0123		0.0123	0.0123	0.0000	175.6529	175.6529	3.3700e-003	3.2200e-003	176.6967
Industrial Park	2.47214e+007	0.1333	1.2118	1.0179	7.2700e-003		0.0921	0.0921		0.0921	0.0921	0.0000	1,319.2275 5	1,319.227	0.0253	0.0242	1,327.0670
Total		0.3411	3.1012	2.6050	0.0186		0.2357	0.2357		0.2357	0.2357	0.0000	3,376.0339 9	3,376.033	0.0647	0.0619	3,396.0960

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.73814e+007	3,601.7957	0.3602	0.0745	3,633.0071
Office Park	3.14225e+007	4,133.3723	0.4133	0.0855	4,169.1901
Strip Mall	1.51442e+007	1,992.0923	0.1992	0.0412	2,009.3548

Strip Mall	8.87443e+006	1,167.3581	0.1167	0.0242	1,177.4738
Total		10,894.6183	1.0895	0.2254	10,989.0259

6.0 Area Detail

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	24.2369	6.3000e-004	0.0679	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.1307	0.1307	3.5000e-004	0.0000	0.1396	
Unmitigated	24.2369	6.3000e-004	0.0679	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.1307	0.1307	3.5000e-004	0.0000	0.1396	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	3.6616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	20.5689					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	6.4300e-003	6.3000e-004	0.0679	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.1307	0.1307	3.5000e-004	0.0000	0.1396	
Total	24.2369	6.3000e-004	0.0679	1.0000e-005		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	0.1307	0.1307	3.5000e-004	0.0000	0.1396	

7.0 Water Detail

	Total CO2	CH4	N2O	CO2e
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Category	MT/yr			
Unmitigated	936.6151	25.7817	0.6213	1,766.3157

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	347.527 / 0	357.6146	11.3489	0.2725	722.5443
Office Park	279.102 / 171.063	365.9604	9.1223	0.2205	659.7214
Strip Mall	162.477 / 99.5824	213.0401	5.3105	0.1284	384.0500
Total		936.6151	25.7817	0.6213	1,766.3157

8.0 Waste Detail

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,142.2444	67.5047	0.0000	2,829.8621
Unmitigated	1,142.2444	67.5047	0.0000	2,829.8621

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e

Land Use	tons	MT/yr			
Industrial Park	1863.5	378.2737	22.3553	0.0000	937.1570
Office Park	1460.42	296.4521	17.5198	0.0000	734.4474
Strip Mall	2303.15	467.5186	27.6296	0.0000	1,158.257 6
Total	1,142.2444	67.5047	0.0000	2,829.862	1



Rincon Consultants, Inc.

Environmental Scientists

Planners

Engineers

M E M O R A N D U M

<input type="checkbox"/> Ventura 180 North Ashwood Avenue Ventura, California 93003 805 644 4455	<input type="checkbox"/> San Luis Obispo 1530 Monterey Street Suite D San Luis Obispo, California 93401 805 547 0900	<input type="checkbox"/> Carlsbad 2215 Faraday Avenue Suite A Carlsbad, California 92008 760 918 9444	<input checked="" type="checkbox"/> Monterey 437 Figueroa Street Suite 203 Monterey, California 93940 831 333 0310	<input type="checkbox"/> Oakland 449 15th Street Suite 303 Oakland, California 94612 510 834 4455
<input type="checkbox"/> Fresno 7080 North Whitney Avenue, Suite 101 Fresno, California 93720 559 228 9925	<input type="checkbox"/> Sacramento 4825 J Street Suite 200 Sacramento, California 95819 916 706 1374	<input type="checkbox"/> Los Angeles 250 East 1st Street Suite 301 Los Angeles, California 90012 213 788 4842	<input type="checkbox"/> Santa Barbara 209 E. Victoria Avenue Santa Barbara, California 93101 805 319 4092	<input type="checkbox"/> Redlands 301 9th Street Suite 310 Redlands, California 92374 909 253 0705

Date: August 31, 2017
To: Megan Hunter, Director
Project: City of Salinas Community Development Department
From: Megan Jones, Senior Program Manager
E-mail: mjones@rinconconsultants.com
cc: Lisa Brinton, Senior Planner
Re: Peer Review for the City of Salinas Economic Development Element EIR Air Quality and Climate Change and Greenhouse Gas Sections

The City of Salinas is currently preparing an Economic Development Element (EDE) and associated Environmental Impact Report (EIR). The EIR is near completion and intended for circulation in September 2017. However, the City recently updated the EDE to remove several planned expressways, which necessitates revision of the Traffic Impact Assessment (TIA) and related EIR sections. Rincon Consultants, Inc. (Rincon) reviewed the EDE EIR air quality, and climate change and greenhouse gas (GHG) emissions analyses in light of the project description changes and associated TIA revisions to identify any changes that would need to be made to the analyses as a result of removals of planned expressways. Our review focused on the technical modeling, impact determinations, and mitigation measures associated with air quality, and climate change and GHG emissions, and includes recommendations for revisions to the EDE EIR to account for the newly proposed removal of the planned expressways.

Air Quality

The column titled “Existing ADEIR Significance With Expressways” in Table 1 contains a summary of the air quality impacts and significance determinations in the current EDE EIR. The column titled “Recommended Impact Significance Without Expressways” in Table 1 summarizes the recommended significance determination of each project impact with the newly proposed removal of the planned expressways. Table 1 also identifies if and what revisions would be required in the EIR as a result of the

proposed changes. As outlined in Table 1, the analysis, impact determination, and mitigation measures for seven of the nine impacts identified in the current EDE EIR would not require changes as a result of removing the planned expressways from the EDE EIR. However, removal of the planned expressways may require removal of a mitigation measure associated with recommended changes to the significance determination for Impacts AQ-4 and AQ-5. Changes to the significance determination for Impacts AQ-4 and AQ-5 are summarized in Table 1 and discussed in more detail following the table.

Table 1 Summary of Changes to Air Quality Impact Analyses

Impact Number	Impact	Existing ADEIR Significance With Expressways	Recommended Impact Significance Without Expressways	Revisions to Significance Determination in EIR Required? (Yes/No)	Summary of Changes
AQ-1	Development resulting in conflict with the air quality plan for ozone.	No impact	No impact	No	The Monterey Bay Air Resources District (MBARD) was contacted regarding preparation of a consistency determination. After reviewing the project description, MBARD concluded that a consistency determination was not necessary because the project would not facilitate development of any residential uses. The removal of the planned expressways from the proposed project would not add any residential uses and, therefore, the determination would remain the same
AQ-2	Development resulting in violation of criteria air pollutant standards – ozone and precursors.	No impact	No impact	No	MBARD's guidance for analysis of air quality impacts of planning documents consists of assessing consistency with the Air Quality Plan, as described above for Impact AQ-1. The removal of the expressways from the proposed project would not add any residential uses and, therefore, the determination would remain the same.
AQ-3	Development resulting in substantial	No impact	No impact	No	MBARD's guidance for analysis of cumulative air quality impacts of planning

	cumulative contribution to the existing non-attainment status for ozone.				documents consists of assessing consistency with the Air Quality Plan, as described above for Impact AQ-1. The removal of the expressways from the proposed project would not add any residential uses and, therefore, the determination would remain the same.
AQ-4	Violation of criteria air pollutant standards – construction phase particulate matter.	Less than significant with mitigation	Less than significant with mitigation	Yes	No new impact analysis would be required. However, Mitigation Measure AQ-2 would no longer apply because it specifically addressed the potential impacts to air quality during construction of the expressways. <u>Summary of Change:</u> Remove Mitigation Measure AQ-2.
AQ-5	Substantial cumulative contribution to the existing non-attainment status for particulate matter.	Less than significant with mitigation	Less than significant with mitigation	Yes	See <i>Summary of Changes</i> for Impact AQ-4. The cumulative analysis should be revised to remove expressway construction particulate matter as a contributor to cumulative impacts. <u>Summary of Change:</u> Remove Mitigation Measure AQ-2.
AQ-6	Exposure of sensitive receptors to substantial pollutant concentrations from future point sources of emissions within target areas.	Less than significant	Less than significant	No	This impact would remain less than significant. Removal of the expressways from the proposed project would not affect future point sources of emissions within the Target Areas. As described in the EDE EIR, MBARD issues permits for stationary emissions sources consistent with MBARD's rules and regulations. Required conformance with MBARD rules and regulations would reduce potential impacts. This would remain the same with

					removal of the expressways and no mitigation would be required.
AQ-7	Exposure of sensitive receptors to toxic air contaminants resulting from increased traffic generated by the proposed project.	Less than significant	Less than significant	No	<p>Removal of the planned expressways from the proposed project would result in a redistribution of forecasted trips within Salinas. However, as noted in Section 3.12 of the EIR, the redistribution of trips would not result in an urban roadway with traffic volumes in excess of 100,000 daily trips.</p> <p>According to the ARB, in general, urban area roadways with traffic volumes under 100,000 daily trips are considered to have less than significant adverse health effects. Therefore, impacts would remain less than significant and no changes to the EDE EIR would be required.</p>
AQ-8	Exposure of sensitive receptors to carbon monoxide concentrations resulting from increased traffic and traffic congestion generated by the proposed project.	Less than significant	Less than significant	No	<p>As mentioned above for Impact AQ-7, removal of the planned expressways from the proposed project would result in a redistribution of forecasted trips within Salinas. Although some roadways may operate at LOS E or LOS F as a result of the proposed project even after implementation of mitigation measures, there are currently several factors that, when combined, make substantial concentrations of carbon monoxide unlikely. These factors include: high vehicle volumes/ concentrations, existing physical constraints, such as high density, high profile buildings, or other obstructions that could prevent dispersion of carbon monoxide, which are largely absent, and predominant weather conditions in the</p>

					area, which include air movement that would help facilitate carbon monoxide dispersion. Further, under existing state regulatory and legislative mandates, emissions volumes from all classes of vehicles in the vehicle fleet will continue to decline. Therefore, this impact would remain less than significant.
AQ-9	Potential to create objectionable odors.	Less than significant	Less than significant	No	The removal of the planned expressways from the proposed project would reduce the potential for objectionable odors due to fewer odorous diesel and construction emissions associated with development of the expressway as a major transportation route through the area. Therefore, this impact would remain less than significant.

Bolded text represents an impact statement that would require revisions

The discussion below further elaborates on the anticipated changes required for Impacts AQ-4 and AQ-5 as a result of the removal of planned expressways from the project description.

Impact AQ-4

The determination of this impact analysis is based on research conducted by MBARD which suggests that projects including earthmoving activities on over 2.2 acres per day or general construction activities on over 8.1 acres per day are correlated with emissions that exceed MBARD's threshold of 82 pounds of particulate matter per day. As noted in the EDE EIR, it is possible that future individual projects proposed within the Target Areas and/or construction of the expressway projects could involve grading that exceeds 2.2 acres per day. Because future individual projects proposed within the Target Areas and or/construction of the individual expressway projects could involve grading that exceeds 2.2 acres per day, it was determined that Mitigation Measures AQ-1 and AQ-2 would be required. Mitigation Measure AQ-1 requires that the project proponents prepare a grading plan subject to review and approval by the City. Mitigation Measure AQ-1 also outlines measures that shall be included in the grading plan in the event that earthmoving activities take place on over 2.2 acres per day or general construction activities take place on over 8.1 acres per day. Mitigation Measure AQ-2 requires that the City (or developer if constructed by a developer) shall prepare a grading plan (subject to review and approval by the City if prepared by a developer). Although the project description was revised to remove the expressways, earthmoving activities on over 2.2 acres per day or general construction activities on over 8.1 acres per day could still occur within the Target Areas. Therefore, Mitigation Measure AQ-1 would still apply to the revised project and the general impact analysis would primarily remain the same. However, because

Mitigation Measure AQ-2 relates specifically to the construction of expressways, this mitigation measure would no longer apply to the updated project. Therefore, to incorporate the updated project description (expressway removal), Mitigation Measure AQ-2 should be removed from the EIR.

Impact AQ-5

The EDE EIR analyzed the cumulative contribution of PM₁₀ separately from the individual, project-level impact (Impact AQ-4). In accordance with MBARD's Air Quality Guidelines, a project that would result in particulate matter emissions in excess of the project level standard would also result in a cumulative contribution to the existing non-attainment status for particulate matter. As such, Mitigation Measures AQ-1 and AQ-2 (summarized above) were required to reduce cumulative fugitive dust emissions to a less than significant level. As discussed previously, Mitigation Measure AQ-2 relates specifically to the construction of expressways. As such, similar to Impact AQ-4, the impact analysis and Mitigation Measure AQ-1 would remain, while Mitigation Measure AQ-2 would no longer apply and should be removed from the EIR.

Climate Change Greenhouse Gas Emissions

The column titled "Existing ADEIR Significance With Expressways" in Table 2 includes a summary of the climate change and GHG emissions impacts and significance determinations in the current EDE EIR. The column titled "Recommended Impact Significance Without Expressways" in Table 2 summarizes the recommended significance determination of each project impact with the newly proposed removal of the planned expressways. Table 2 also identifies if and what revisions would be required in the EIR as a result of the proposed changes. As outlined in Table 2, the analysis, impact determination, and mitigation measures for one of the two impacts identified in the current EDE EIR would not require changes as a result of removing the planned expressways from the EDE. However, these changes may require revisions to Impact GHG-1 because of the expressway removal. The recommended changes to Impact GHG-1 are summarized in Table 2 and discussed in more detail following the table.

Table 2 Summary of Changes to Climate Change and Greenhouse Gas Emissions Analyses

Impact Number	Impact	Existing	Recommended	Revisions to Significance Determination in EIR		Summary of Changes
		ADEIR Significance With Expressways	Impact Significance Without Expressways	Required?	(Yes/No)	
GHG-1	Generation of significant greenhouse gas emissions in the buildup year of 2045.	Significant and Unavoidable	Significant and Unavoidable	Yes		Removal of the expressways from the project would result in a decrease in project construction emissions because the expressways would no longer be built. However, vehicle miles traveled would increase, which would result in a corresponding increase in operational GHG emissions associated with mobile activity. Specific individual project design is currently not known, and the original emissions model

					included CalEEMod default trip generation rates, which do not account for the potential diversion of trips from the existing roadway network to the expressways. Therefore, the GHG emissions generated by the proposed project would generally be consistent with the EDE EIR analysis. Therefore, mitigation measure GHG-1 would still apply, and this impact would remain significant and unavoidable.
GHG-2	Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than Significant with Mitigation	Less than Significant with Mitigation	No	<p><u>Summary of Change:</u> Remove emissions from construction of the expressway from the total project emissions.</p> <p>Removal of the expressways from the proposed project would not result in an additional conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.</p>

Bolded text represents an impact statement that would require revisions

The discussion below further elaborates on the anticipated changes required for Impact GHG-1 as a result of the removal of expressways from the project description.

Impact GHG-1

The climate change and greenhouse gas emissions section of the EDE EIR found that the project may generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Mitigation Measure GHG-1 was proposed to reduce the significant effect related to GHG emissions. According to the *Buildout GHG Effects* section, this mitigation measure would ensure that the City is demonstrating progress towards meeting post-2020 and post-2030 state GHG emissions reduction goals. The climate change and greenhouse gas emissions section also notes that, while Mitigation Measure GHG-1 would result in reduced GHG emissions, it is possible that individual projects would not achieve GHG reductions required for their individual impacts to be less than significant such that the cumulative emissions from all development would not meet the trajectory of reducing cumulative emissions to below the 2045 emissions reduction target. As such, the impact is considered significant and potentially unavoidable. With the removal of the expressways from the project, the impact would remain significant and potentially unavoidable. However, the GHG emissions, measured in

metric tons of CO₂ equivalent¹ (CO₂e), would be less than shown based on the currently proposed project with removal of construction emissions associated with development of the planned expressways. The emissions associated with the construction of the expressways were modeled in RoadMod and construction and operation of the Target Areas were modeled using California Emissions Estimator Model (CalEEMod) Version 2016.3.1 software. Therefore, the project-generated emissions would not need to be remodeled, but instead, quantified without the construction emissions from the expressways in order to appropriately characterize the GHG emissions associated with the project as currently proposed. Nonetheless, because this impact would remain significant and potentially unavoidable, Mitigation Measure GHG-1 would still apply.

Conclusion

Based on the removal of the planned expressways from the proposed project, Impacts AQ-4, AQ-5, and GHG-1 in the EDE EIR would need to be revised slightly. Specifically, Impacts AQ-4 and AQ-5 would require removal of Mitigation Measure AQ-2. However, the analysis for these impacts would not need to be revised because the analysis does not specifically quantify emissions associated with the expressways, and instead notes that earthmoving activities on over 2.2 acres per day or general construction activities on over 8.1 acres per day are correlated with emissions that exceed MBARD's threshold of 82 pounds of particulate matter per day and would therefore require mitigation. That portion of the analysis would remain the same. Impact GHG-1 would also need to be revised, as discussed under *Impact GHG-1* above, to remove the construction emissions associated with the expressway. The project-generated emissions would remain significant and unavoidable, however, the amount of emissions (measured in metric tons of CO₂e) generated by the project would be less than currently presented in the EIR because the construction-generated emissions from the expressways would be removed.

¹ Carbon dioxide equivalent describes how much global warming a given type of GHG will cause, with the GWP of CO₂ as the base reference. It is useful because it allows comparisons of the impact from many different GHGs, such as methane, perfluorocarbons or nitrous oxide.

SALINAS EDE EIR - FUEL CONSUMPTION (YEAR 2045 EMFAC RESULTS)

calendar_yea	season_m	sub_area	vehicle cla	fuel	process	pollutant	emission	
2045 Annual		Monterey (ILHD2		Gas	PMBW	Fuel	0.00372085	EDE Annual VMT
2045 Annual		Monterey (ILHD2		Gas	PMBW	Fuel	0.00059197	EDE Daily VMT
2045 Annual		Monterey (ILHD2		Gas	PMBW	Fuel	0.01714566	EDE Daily Fuel (1000 gal)
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.01218381	EDE Annual Fuel (gal)
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.18198325	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00704346	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.11153208	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00480936	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00954001	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	4.50E-05	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00035566	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00319683	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	1.28E-05	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00010104	
2045 Annual		Monterey (IT6TS		Gas	RUNEX	Fuel	0.00903895	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	4.66E-05	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	0.00021297	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	0.0016531	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	2.02E-05	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	7.78E-06	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	0.00032675	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	0.00245732	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	0.00812306	
2045 Annual		Monterey (IT6TS		Gas	IDLEX	Fuel	6.03E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.00437124	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	4.07E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.32504387	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.00495787	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	1.79E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.00076582	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	4.04E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	9.32E-06	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.00493973	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	1.76E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	7.75E-05	
2045 Annual		Monterey (IT6TS		Gas	STREX	Fuel	0.0052866	
2045 Annual		Monterey (IT6TS		Gas	HOTSOAK	Fuel	0.0003032	

2045 Annual	Monterey (IT6TS	Gas	HOTSOAK Fuel	0.00152034
2045 Annual	Monterey (IT6TS	Gas	HOTSOAK Fuel	1.11E-06
2045 Annual	Monterey (IT6TS	Gas	RUNLOSS Fuel	0.00030423
2045 Annual	Monterey (IT6TS	Gas	RUNLOSS Fuel	0.00496127
2045 Annual	Monterey (IT6TS	Gas	RUNLOSS Fuel	0.00138637
2045 Annual	Monterey (IT6TS	Gas	RESTLOS! Fuel	5.67E-05
2045 Annual	Monterey (IT6TS	Gas	RESTLOS! Fuel	0.00046401
2045 Annual	Monterey (IT6TS	Gas	RESTLOS! Fuel	1.53E-05
2045 Annual	Monterey (IT6TS	Gas	DIURN Fuel	0.00081613
2045 Annual	Monterey (IT6TS	Gas	DIURN Fuel	7.99E-06
2045 Annual	Monterey (IT6TS	Gas	DIURN Fuel	0.00026051
2045 Annual	Monterey (IT6TS	Gas	PMTW Fuel	3.13E-06
2045 Annual	Monterey (IT6TS	Gas	PMTW Fuel	0.00609049
2045 Annual	Monterey (IT6TS	Gas	PMTW Fuel	7.15E-05
2045 Annual	Monterey (IT6TS	Gas	PMBW Fuel	0.00133273
2045 Annual	Monterey (IT6TS	Gas	PMBW Fuel	9.19E-06
2045 Annual	Monterey (IT6TS	Gas	PMBW Fuel	0.03726364
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.0004042
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.01447327
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00015605
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00046761
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	4.58E-06
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00014926
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	1.79E-06
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00038925
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	1.12E-05
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00078231
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00021806
2045 Annual	Monterey (IT7IS	Gas	RUNEX Fuel	0.00087076
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.0001756
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.00262065
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.02956239
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.00206212
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.00119315
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	9.85E-05
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.00014842
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	2.97E-05
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.03664296
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.00328181
2045 Annual	Monterey (IT7IS	Gas	STREX Fuel	0.01167728

2045 Annual	Monterey (IT7IS	Gas	STREX	Fuel	0.00101147
2045 Annual	Monterey (IT7IS	Gas	HOTSOAK	Fuel	6.27E-11
2045 Annual	Monterey (IT7IS	Gas	HOTSOAK	Fuel	9.25E-13
2045 Annual	Monterey (IT7IS	Gas	HOTSOAK	Fuel	0.00290141
2045 Annual	Monterey (IT7IS	Gas	RUNLOSS	Fuel	8.32E-05
2045 Annual	Monterey (IT7IS	Gas	RUNLOSS	Fuel	7.58E-11
2045 Annual	Monterey (IT7IS	Gas	RUNLOSS	Fuel	1.84E-12
2045 Annual	Monterey (IT7IS	Gas	RESTLOS	Fuel	0.01064072
2045 Annual	Monterey (IT7IS	Gas	RESTLOS	Fuel	0.00028257
2045 Annual	Monterey (IT7IS	Gas	RESTLOS	Fuel	0.00309727
2045 Annual	Monterey (IT7IS	Gas	DIURN	Fuel	9.97E-05
2045 Annual	Monterey (IT7IS	Gas	DIURN	Fuel	0.02082064
2045 Annual	Monterey (IT7IS	Gas	DIURN	Fuel	0.00048581
2045 Annual	Monterey (IT7IS	Gas	PMTW	Fuel	0.00230288
2045 Annual	Monterey (IT7IS	Gas	PMTW	Fuel	8.25E-05
2045 Annual	Monterey (IT7IS	Gas	PMTW	Fuel	0.00286206
2045 Annual	Monterey (IT7IS	Gas	PMBW	Fuel	0.00022822
2045 Annual	Monterey (IT7IS	Gas	PMBW	Fuel	0.0077105
2045 Annual	Monterey (IT7IS	Gas	PMBW	Fuel	0.00037977
2045 Annual	Monterey (ILDT1	Dsl	RUNEX	Fuel	0.00462164
2045 Annual	Monterey (ILDT1	Dsl	RUNEX	Fuel	4.90E-05
2045 Annual	Monterey (ILDT1	Dsl	RUNEX	Fuel	0.00029803
2045 Annual	Monterey (ILDT1	Dsl	RUNEX	Fuel	0.00757489
					0.94559839