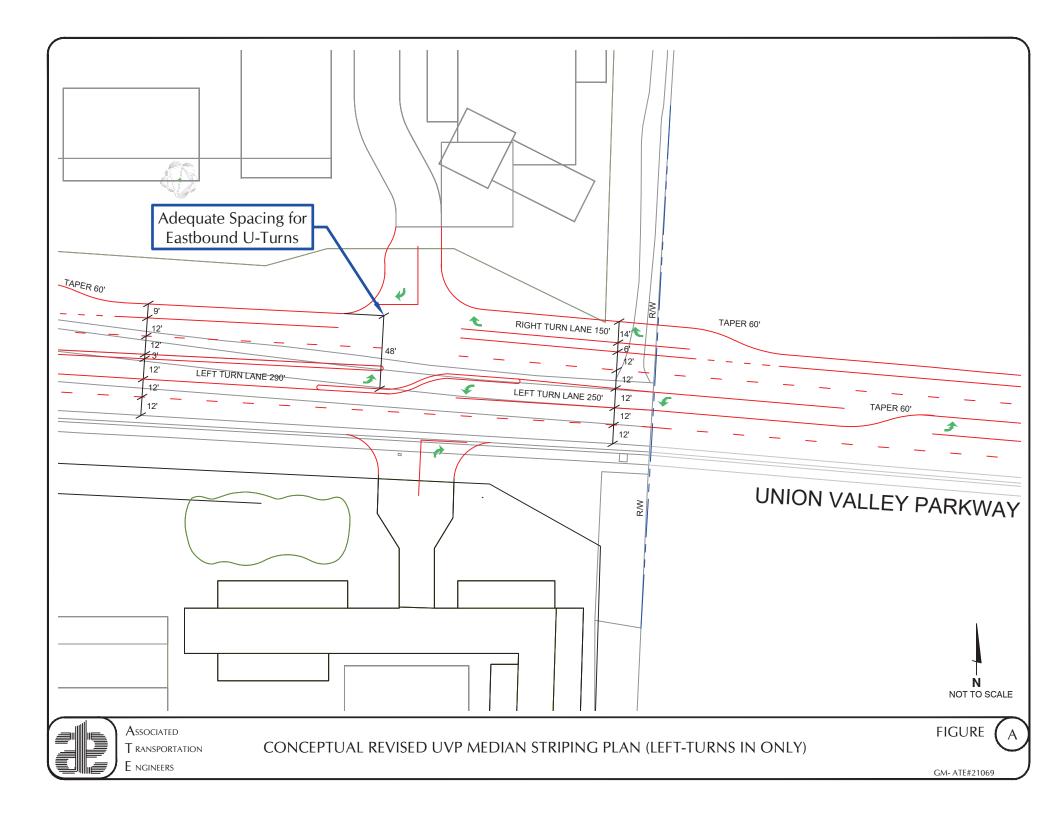
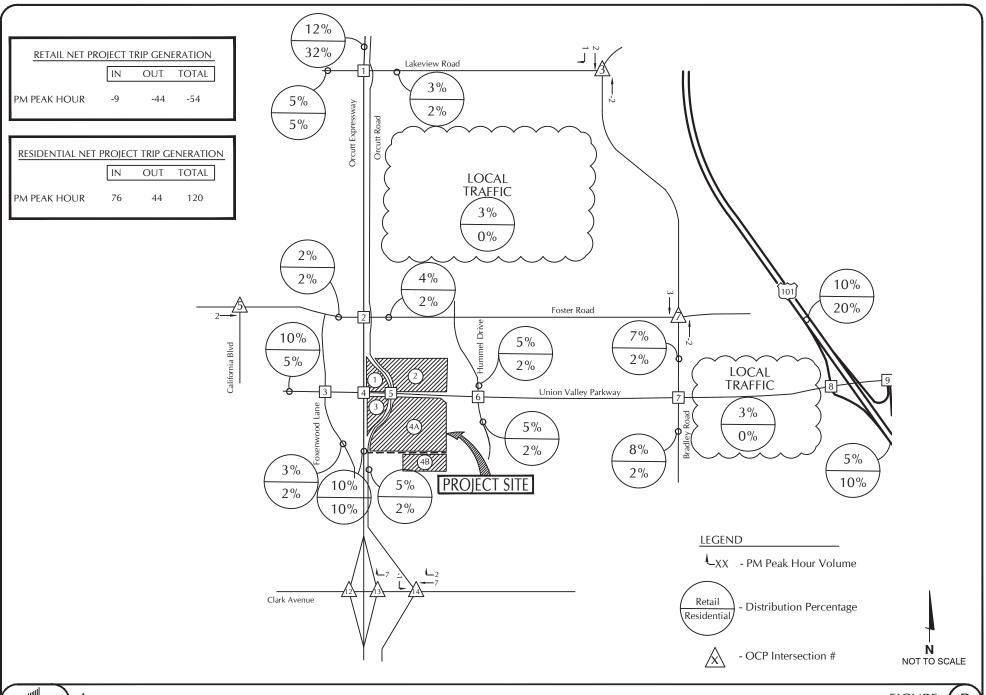


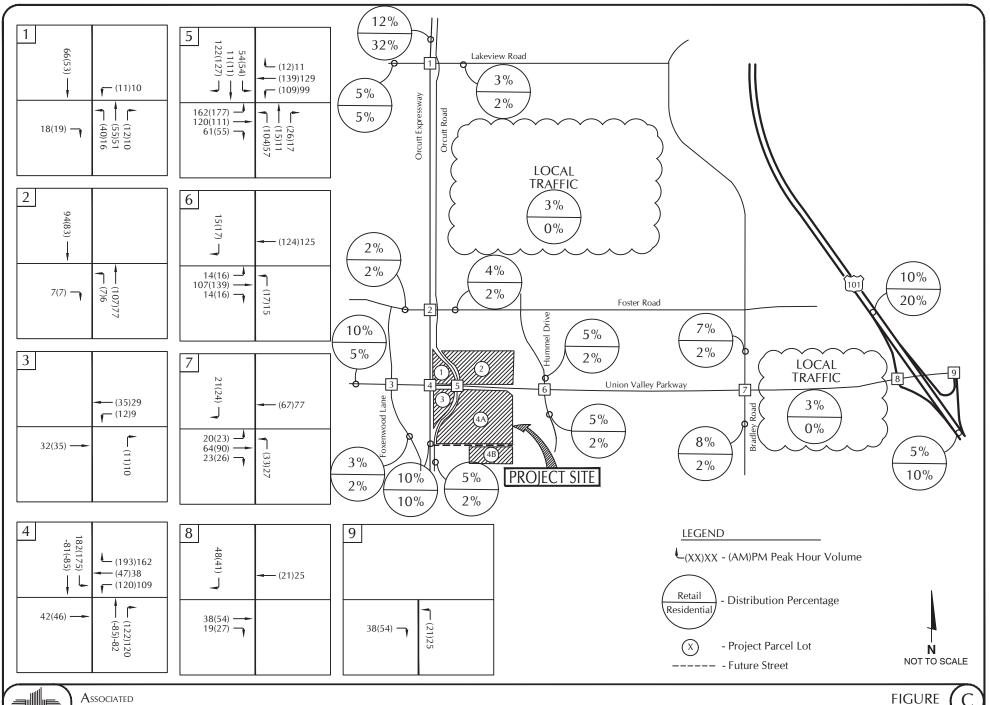
APPENDIX A Supplemental Traffic Analyses





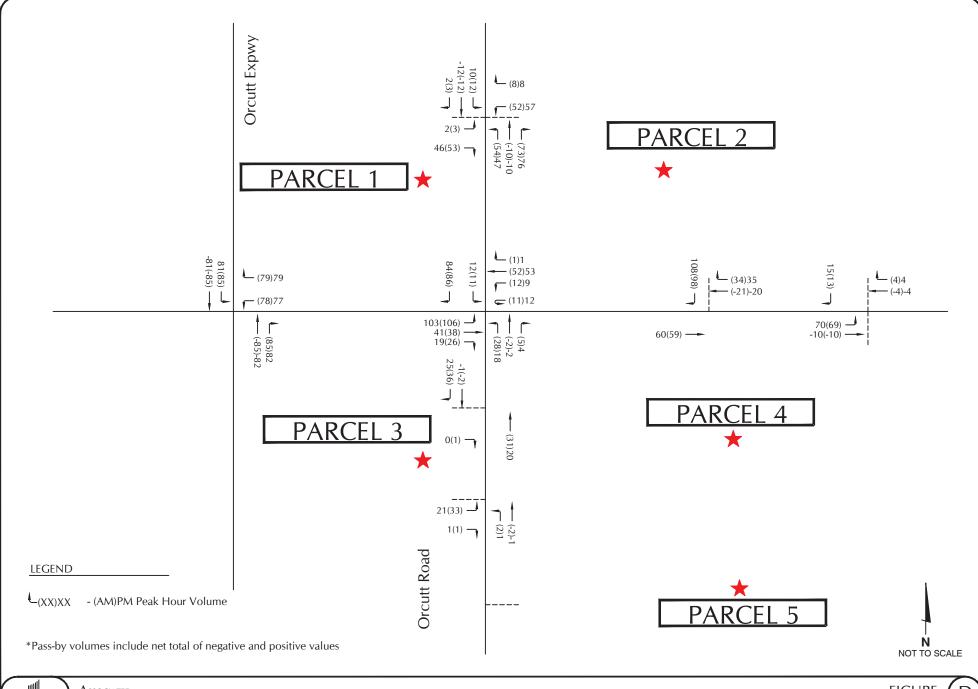


FIGURE



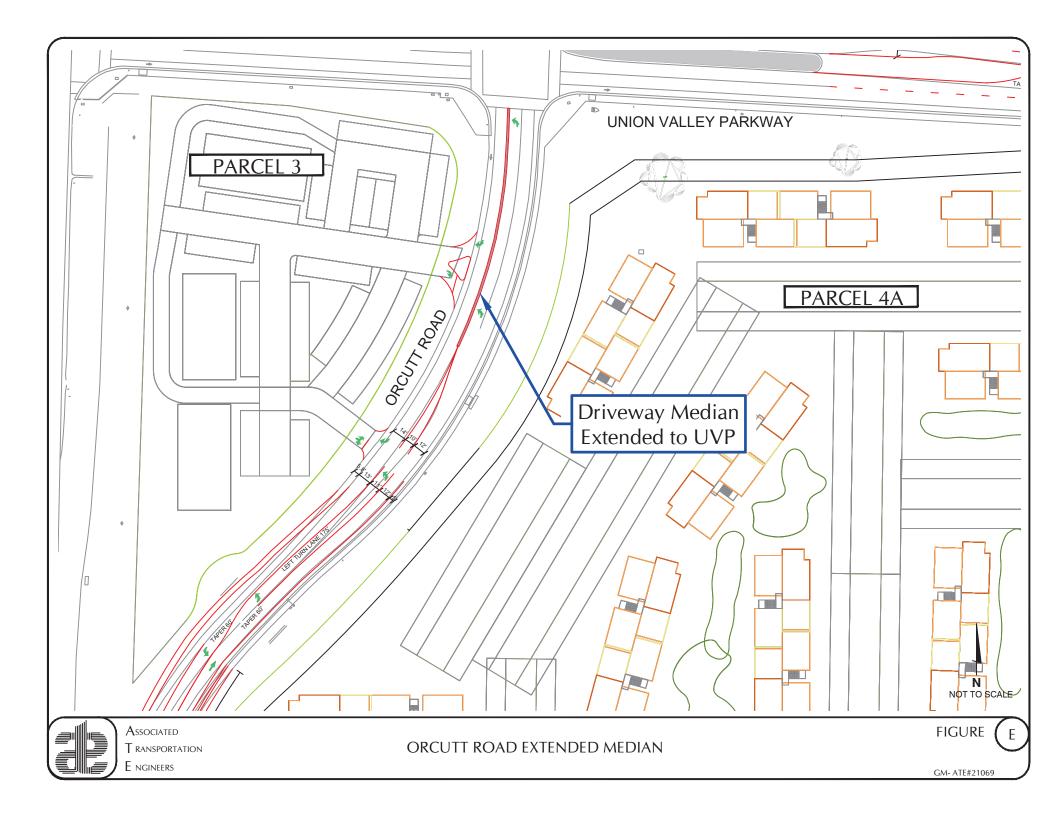


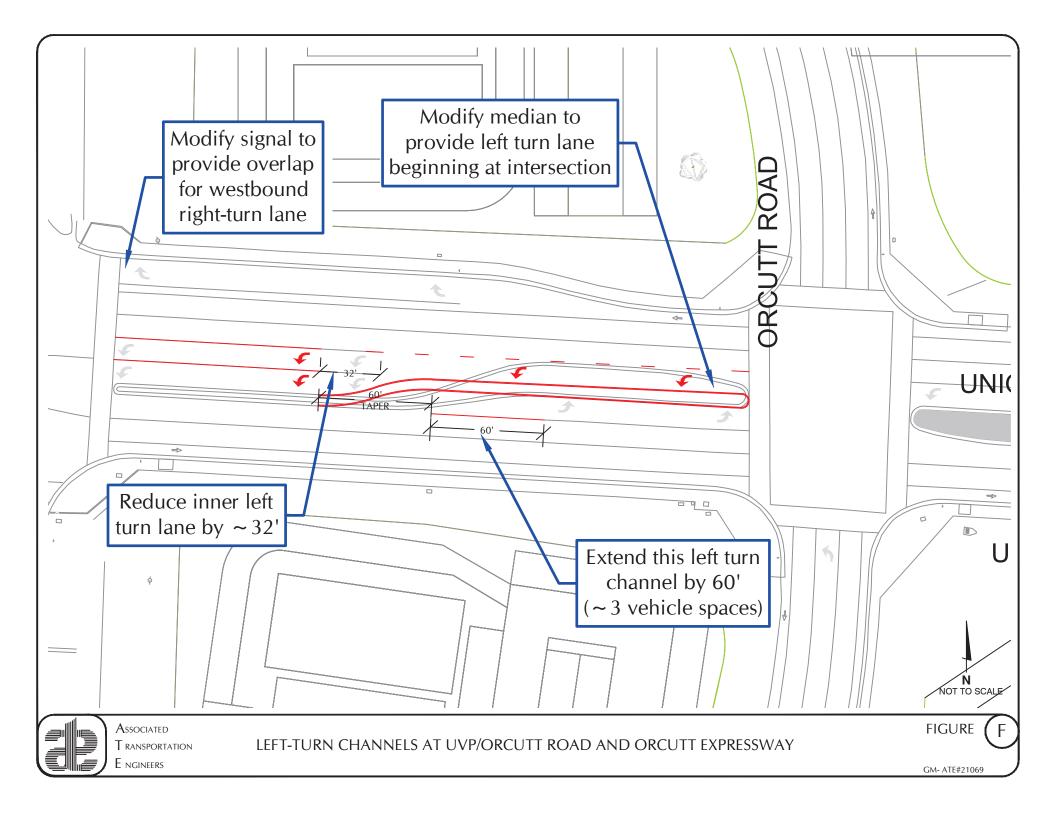
FIG





FIGURE





ASSOCIATED TRANSPORTATION ENGINEERS

Memo

To: Michael Stoltey & Laurie Tamura

From: Scott Schell, ATE

cc:

Date: June 6, 2023

Re: Richards Ranch Project

ATE 21069M02

ATE conducted video traffic counts in May 2023 at the Orcutt Expressway/Union Valley Parkway intersection in order to validate the 2019 (pre-Covid) traffic volumes that were used in the traffic study completed for the Richards Ranch Project. Tables A and B compare the 2023 and 2019 traffic volumes at the intersection.

Table A
Traffic Volume Comparison
Orcutt Expressway (SR 135) North of Union Valley Parkway

	2	023 Count Data		2019 Count Data	
Peak Hour	May 23	May 24	Average	December 17	% Difference
PM Peak Hour	2,434 VPH	2,488 VPH	2,461 VPH	2,625 VPH	-6.2%

Table B
Traffic Volume Comparison
Union Valley Parkway East of Orcutt Expressway (SR 135)

	2	023 Count Data		2019 Count Data	
Peak Hour	May 23	May 24	Average	December 17	% Difference
PM Peak Hour	1,370 VPH	1,432 VPH	1,401 VPH	1,512 VPH	-7.3%

The data presented in Tables A and B show that the traffic counts collected adjacent to the Orcutt Expressway/Union Valley Parkway intersection in 2023 are approximately 6% to 7% *lower* than the 2019 traffic counts that were used for the Richards Ranch traffic study. The volumes used in the traffic study are therefore more conservative than the current count data.



Memo

To: Michael Stoltey & Laurie Tamura

From: Scott Schell, ATE

cc:

Date: June 14, 2023

Re: Richards Ranch Project

ATE 21069M03

Additional traffic counts were conducted in May 2023 adjacent to the Orcutt Expressway/Union Valley Parkway intersection in order to validate the 2019 (pre-Covid) traffic volumes that were used in the traffic study completed for the Richards Ranch Project. Tables A and B compare the 2023 and 2019 traffic volumes at the intersection.

Table A
Traffic Volume Comparison
Orcutt Expressway (SR 135) South of Union Valley Parkway

		2023 Cou		2019 Count Data	% Difference	
Peak Hour	May 30	May 31	June 1	Average	December 17	
AM Peak Hour	2,039 VPH	1,997 VPH	2,014 VPH	2,017 VPH	2,269 VPH	-11.1%
PM Peak Hour	2,520 VPH	2,575 VPH	2,544 VPH	2,546 VPH	2,520 VPH	+1.0%

Table B
Traffic Volume Comparison
Union Valley Parkway East of Orcutt Expressway (SR 135)

		2023 Cou	nt Data	-	2019 Count Data	% Difference
Peak Hour	May 30	May 31	June 1	Average	December 17	
AM Peak Hour	1,224 VPH	1,156 VPH	1,194 VPH	1,191 VPH	1,436 VPH	-17.1%
PM Peak Hour	1,404 VPH	1,437 VPH	1,428 VPH	1,423 VPH	1,512 VPH	-5.9%

The data presented in Tables A and B show that the AM and PM peak hour traffic counts collected adjacent to the Orcutt Expressway/Union Valley Parkway intersection in 2023 are approximately 6% to 17% *lower* than the 2019 traffic counts that were used for the Richards Ranch traffic study. It is noted that the PM peak hour traffic counts collected on Orcutt Expressway (SR 135) south of Union Valley Parkway are similar (1% higher) to the 2019 traffic counts that were used for the Richards Ranch traffic study. The volumes used in the traffic study are therefore more conservative than the current count data.

Associated Transportation Engineers Trip Generation Worksheet - October 2023 Update

RICHARDS RANCH - SANTA MARIA (#21069) - WITH INTERNAL TRIP FACTORS

		ADT	AM Internal	PM Internal		DT			AM DE A	K HOUF	,				DM DEA	K HOUR		
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
Use	Size	Factor	ractor	ractor	Nate	TTIPS	Nate	TTIPS	111 /0	TTIPS	Out /6	TTIPS	Nate	IIIþa	111 /0	TTIPS	Out /6	TTIPS
COMMERCIAL																		
High Turnover Sit Down Restaurant (a)	5,000 SF	0.81	0.92	0.70	107.20	434	9.57	44	55%	24	45%	20	9.05	32	61%	20	39%	12
2 Restaurants without Drive Thru (b)	6,000 SF	0.81	0.92	0.70	97.14	472	1.43	8	50%	4	50%	4	12.55	53	55%	29	45%	24
6 Drive Thru Restaurants (c)	18,750 SF	0.81	0.92	0.70	467.48	7,100	44.61	770	51%	393	49%	377	33.03	434	52%	226	48%	208
Shopping Center (d)	55,000 SF	0.81	0.92	0.70	94.49	4,210	3.53	179	62%	111	38%	68	9.84	379	48%	182	52%	197
Gas Station with Mart (e)	10 Fueling Position	s 0.81	0.92	0.70	200.80	1,626	16.06	148	50%	74	50%	74	18.42	129	50%	65	50%	64
Car Wash-Automated (f)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Lube Station (g)	3 Bays	0.81	0.92	0.70	40.00	97	3.00	8	67%	5	33%	3	4.85	10	56%	6	44%	4
Mini Storage (h)	39,500 SF	0.81	0.92	0.70	1.45	46	0.09	3	59%	2	41%	1	0.15	4	47%	2	53%	2
Subtotals:	124,250 SF					14,122		1,165		616		549		1,054		537		517
RESIDENTIAL																		
Three Story Apartments (i)	400 DU	0.81	0.92	0.70	6.60	2.138	0.37	135	24%	32	76%	103	0.48	135	63%	85	37%	50
Two Story Townhomes (i)	95 DU	0.81	0.92	0.70	6.60	508	0.37	32	24%	8	76%	24	0.48	32	63%	20	37%	12
Subtotals:	495 DU					2,646		167		40		127		167		105		62
Totals:						16,768		1,332		656		676		1,221		642		579

- (a) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.
 (b) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.
 (c) Trip generation based on ITE rates for Fast-Foot Restaurant with Driver Through Window (ITE #934) Average Rate.
- (c) This persentation based on TIE rates for Per-Popular Resident (FE 872). Over Indige Plant (FE 872) eveninger Plant (F
- (g) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.
- (i) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).
 (i) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	РМ О
Commercial External Trips - Retail	4,210	179	111	68	379	182	19
30% ADT, 20% AM, 40% PM Pass-By Trips - Applied to Retail	1,263	36	22	14	152	73	79
70% ADT, 80% AM, 60% PM Primary Trips - Remainder Retail	2,947	143	89	54	227	109	11
SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	РМО
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	906	52	28	24	85	49	36
32% ADT, 20% AM, 43% PM Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	290	10	6	4	37	21	1
38% ADT, 80% AM, 57% PM Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	616	42	22	20	48	28	2
FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM (
Commercial External Trips - Restaurant Pads	7.100	770	393	377	434	226	20
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	3.763	385	197	188	239	125	11
17% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	3,337	385	196	189	195	101	9
GAS STATION PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM
Commercial External Trips - Gas Station	1.626	148	74	74	129	65	6
76% ADT, 76% AM, 75% PM Pass-By Trips - Applied to Gas Station	1.236	113	57	56	97	49	- 2
24% ADT, 24% AM, 25% PM Primary Trips - Remainder Gas Station	390	35	17	18	32	16	1
CAR WASH PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM
Commercial External Trips - Car Wash	137	5	3	2	13	7	- 6
20% Pass-By Trips - Applied to Car Wash	27	1	1	0	3	2	
30% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	
TOTAL PASS-BY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM
Shopping Center	1,263	36	22	14	152	73	7
Sit Down Restaurant and Fast Casual Restaurant	290	10	6	4	37	21	1
Fast Food Restaurant	3,763	385	197	188	239	125	11
Gas Station	1,236	113	57	56	97	49	4
Car Wash Total Pass-By Trips	27 6.579	1 545	1 283	0 262	3 528	2 270	2
Total Pass-By Trips	6,579	545	283	262	528	270	
TOTAL EXTERNAL PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	РМ
Commercial - External	7,400	609	326	283	512	259	2
Lube Station - External	97	8	5	3	10	6	
Mini Storage - External	46	3	2	1	4	2	
Residential - External	2,646	167	40	127	167	105	6
Total External Trips	10,189	787	373	414	693	372	32

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 1 WITH INTERNAL TRIP FACTORS

		ADT Internal	AM Internal	PM Internal	Al	DT			AM PEA	K HOUR					PM PEA	K HOUR	!	
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Gas Station with Mart	10 Fueling Positions	0.81	0.92	0.70	200.80	1,626	16.06	148	50%	74	50%	74	18.42	129	50%	65	50%	64
Lube Station	3 Bays	0.81	0.92	0.70	40.00	97	3.00	8	67%	5	33%	3	4.85	10	56%	6	44%	4
Totals:						1,723		156		79		77		139		71		68

⁽a) Trip generation based on ITE rates for Convenience Store/Gas Station (ITE #945). Fitted Curve Equation for ADT. Average Rate for AM/PM Peak Hours.

⁽b) Trip generation based on ITE rates for Quick Lubrication Vehicle Shop (ITE #941) Average Rate.

GAS STATION PASS-BY & PRIMARY TRIPS Commercial External Trips - Gas Station 76% ADT, 76% AM, 75% PM Pass-By Trips - Applied to Gas Station 24% ADT, 24% AM, 25% PM Primary Trips - Remainder Gas Station	<u>ADT</u>	AM Total	AM In	AM Out	PM Total	PM In	PM Out
	1,626	148	74	74	129	65	64
	1,236	113	57	56	97	49	48
	390	35	17	18	32	16	16
TOTAL EXTERNAL PRIMARY TRIPS Commercial External Lube Station - External Total External Trips	ADT	AM Total	AM In	AM Out	PM Total	<u>PM In</u>	PM Out
	390	35	17	18	32	16	16
	97	8	5	3	10	6	4
	487	43	22	21	42	22	20

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2A WITH INTERNAL TRIP FACTORS

		ADT Internal	AM Internal	PM Internal	Δ.	.DT			AM PEA	K HOUF	ł.				PM PEA	K HOUR	2	
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL																		
Shopping Center(a)	55,000 SF	0.81	0.92	0.70	94.49	4,210	3.53	179	62%	111	38%	68	9.84	379	48%	182	52%	197
Restaurant - Shopping Center (b)	5,000 SF	0.81	0.92	0.70	107.20	434	9.57	44	55%	24	45%	20	9.05	32	61%	20	39%	12
Restaurant Pad 1 - Drive Thru (c)	3,750 SF	0.81	0.92	0.70	467.48	1,420	44.61	154	51%	79	49%	75	33.03	87	52%	46	48%	41
Restaurant Pad 2 - Drive Thru (c)	3,500 SF	0.81	0.92	0.70	467.48	1,325	44.61	144	51%	73	49%	71	33.03	81	52%	42	48%	39
Restaurant Pad 3 - No Drive Thru (d)	3,000 SF	0.81	0.92	0.70	97.14	236	1.43	4	50%	2	50%	2	12.55	26	55%	14	45%	12
Restaurant Pad 4 - No Drive Thru (d)	3,000 SF	0.81	0.92	0.70	97.14	236	1.43	4	50%	2	50%	2	12.55	26	55%	14	45%	12
Restaurant Pad 5 - Drive Thru (c)	2,500 SF	0.81	0.92	0.70	467.48	947	44.61	103	51%	53	49%	50	33.03	58	52%	30	48%	28
Restaurant Pad 6 - Drive Thru (c)	3,000 SF	0.81	0.92	0.70	467.48	1,136	44.61	123	51%	63	49%	60	33.03	70	52%	37	48%	33
Restaurant Pad 7 - Drive Thru (c)	2,500 SF	0.81	0.92	0.70	467.48	947	44.61	102	51%	52	49%	50	33.03	58	52%	30	48%	28
Totals:	81,250 SF					10,891		857		459		398		817		415		402

⁽d) Trip generation based on ITE rates for Fast Casual Restaurant (ITE #930) Average Rate.

SHOPPING CENTER PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External Trips - Retail	4,210	179	111	68	379	182	197
30% ADT, 20% AM, 40% PM Pass-By Trips - Applied to Retail	1,263	36	22	14	152	73	79
70% ADT, 80% AM, 60% PM Primary Trips - Remainder Retail	2,947	143	89	54	227	109	118
SIT DOWN RESTAURANT PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External Trips - Restaurant - Shopping Center and No Drive Thru	906	52	28	24	84	48	36
32% ADT, 20% AM, 43% PM Pass-By Trips - Applied to Restaurant - Shopping Center and No Drive Thru	290	10	6	4	36	21	15
68% ADT, 80% AM, 57% PM Primary Trips - Remainder Restaurant - Shopping Center and No Drive Thru	616	42	22	20	48	27	21
FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External Trips - Restaurant Drive Thru	5,775	626	320	306	354	185	169
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	3,061	313	160	153	195	102	93
47% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	2,714	313	160	153	159	83	76
TOTAL EXTERNAL PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External	6,277	498	271	227	434	219	215
Total External Trips	6,277	498	271	227	434	219	215

⁽a) Trip generation based on ITE rates for Shopping Plaza (ITE #821). Average Rate for ADT and AM Peak Hour. Fitted Curve Equation for PM Peak Hour. (b) Trip generation based on ITE rates for High-Turnover (Sit-Down) Restaurant (ITE #932) Average Rate.

⁽c) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 2B WITH INTERNAL TRIP FACTORS

		ADT Internal	AM Internal	PM Internal	Al	DT			AM PEA	K HOUR					PM PEA	K HOUF	1	
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL Mini Storage(c) Totals:	39,500 SF 39,500 SF	0.81	0.92	0.70	1.45	46 46	0.09	3 3	59%	2 2	41%	1 1	0.15	4 4	47%	2 2	53%	2 2

⁽a) Trip generation based on ITE rates for Mini-Warehouse (ITE #151).

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 3 WITH INTERNAL TRIP FACTORS

		ADT Internal	AM Internal	PM Internal	AI	т	AM PEAK HOUR			PM PEAK HOUR								
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
COMMERCIAL Car Wash-Automated (a)	1 Tunnel	0.55	0.55	0.55	249.00	137	8.50	5	50%	3	50%	2	23.70	13	50%	7	50%	6
Restaurant Pad 8 - Drive Thru (c) Totals:	3,500 SF	0.81	0.92	0.70	467.48	1,325 1,462	44.61	144 149	51%	73 76	49%	71 73	33.03	81 94	52%	42 49	48%	39 45

⁽a) Trip generation for Car Wash-Automated derived from local studies.

⁽b) Trip generation based on ITE rates for Fast-Food Restaurant with Drive-Through Window (ITE #934) Average Rate.

CAR WASH PASS-BY & PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External Trips - Car Wash 20% Pass-By Trips - Applied to Car Wash	137 27	5	3	2	13	7	6
80% Primary Trips - Remainder Car Wash	110	4	2	2	10	5	5
FAST FOOD RESTAURANT PASS-BY & PRIMARY TRIPS	<u>ADT</u>	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External Trips - Restaurant Pads	1,325	144	73	71	81	42	39
53% ADT, 50% AM, 55% PM Pass-By Trips - Applied to Restaurant Pads	702	72	37	35	45	23	22
47% ADT, 50% AM, 45% PM Primary Trips - Remainder Restaurant Pads	623	72	36	36	36	19	17
TOTAL EXTERNAL PRIMARY TRIPS	ADT	AM Total	AM In	AM Out	PM Total	PM In	PM Out
Commercial External	733	76	38	38	46	24	22
Total External Trips	733	76	38	38	46	24	22

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 4 WITH INTERNAL TRIP FACTORS

		ADT	AM	PM		D.			*** 55 *						D14 DE 4			
		Internal	Internal	Internal		DT			AM PEA						PM PEA			
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL Three Story Apartments(a) Totals:	400 DU 400 DU	0.81	0.92	0.70	6.60	2,138 2,138	0.37	135 135	24%	32 32	76%	103 103	0.48	135 135	63%	85 85	37%	50 50

⁽a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

RICHARDS RANCH - SANTA MARIA (#21069) - PARCEL 5 WITH INTERNAL TRIP FACTORS

		ADT Internal	AM Internal	PM Internal	А	DT			AM PEA	K HOUR	l				PM PEA	K HOUR	!	
Use	Size	Factor	Factor	Factor	Rate	Trips	Rate	Trips	In %	Trips	Out %	Trips	Rate	Trips	In %	Trips	Out %	Trips
RESIDENTIAL Two Story Townhomes(a) Totals:	95 DU 95 DU	0.81	0.91	0.70	6.60	508 508	0.37	32 32	24%	8 8	76%	24 24	0.48	32 32	63%	20 20	37%	12 12

⁽a) Trip generation based on ITE rates for Multifamily Housing (Low-Rise) (ITE #220) Fitted Curve Equation.

	NCHRP 684 Internal Trip C	Сар	ture Estimation Tool	
Project Name:	RICHARDS RANCH	Organization:	ATE	
Project Location:	SANTA MARIA		Performed By:	GOM
Scenario Description:	UPDATED WITH FACTORS		Date:	17-Oct-23
Analysis Year:			Checked By:	SAS
Analysis Period:	AM Street Peak Hour		Date:	17-Oct-23

	Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)										
Land Use	Developme	ent Data (<i>For Int</i>	formation Only)		Estimated Vehicle-Trips ³						
Land Ose	ITE LUCs1	ITE LUCs ¹ Quantity Units		1	Total	Entering	Exiting				
Office				1	0						
Retail	821/945/941	55,000	SF		194	120	74				
Restaurant	930/932/934	29,750	SF		893	457	436				
Cinema/Entertainment					0						
Residential	220	495	DU	1	182	43	139				
Hotel					0						
All Other Land Uses ²	151	39,500	SF		4	2	2				
					1,273	622	651				

	Table 2-A: Mode Split and Vehicle Occupancy Estimates										
Land Use		Entering Trip	os		Exiting Trips						
Land Ose	Veh. Occ.4	% Transit	% Non-Motorized		Veh. Occ.4	% Transit	% Non-Motorized				
Office											
Retail	1.72	2%	4%		1.72	2%	4%				
Restaurant	1.72	2%	4%		1.72	2%	4%				
Cinema/Entertainment											
Residential	1.75	2%	4%		1.75	2%	4%				
Hotel											
All Other Land Uses ²	1.72	2%	4%		1.72	2%	4%				

	Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)											
Origin (From)		Destination (To)										
Origin (From)	Office	Office Retail Restaurant Cinema/Entertainment Residential										
Office												
Retail												
Restaurant												
Cinema/Entertainment												
Residential												
Hotel												

	Table 4-A: Internal Person-Trip Origin-Destination Matrix*										
Origin (Frame)			-	Destination (To)							
Origin (From)	Office	Office Retail Restaurant Cinema/Entertainment Residential Ho									
Office		0	0	0	0	0					
Retail	0		17	0	2	0					
Restaurant	0	16		0	4	0					
Cinema/Entertainment	0	0	0		0	0					
Residential	0	2	49	0		0					
Hotel	0	0	0	0	0						

Table 5-A	: Computatio	ns Summary						
Total Entering Exiting								
All Person-Trips	2,191	1,069	1,122					
Internal Capture Percentage	8%	8%	8%					
External Vehicle-Trips ⁵	1,099	536	563					
External Transit-Trips ⁶	40	19	21					
External Non-Motorized Trips ⁶	81	40	41					

Table 6-A: Interna	al Trip Capture Percentaç	ges by Land Use
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	9%	15%
Restaurant	8%	3%
Cinema/Entertainment	N/A	N/A
Residential	8%	21%
Hotel	N/A	N/A

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

²Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

	NCHRP 684 Internal Trip C	Сар	NCHRP 684 Internal Trip Capture Estimation Tool										
Project Name:	RICHARDS RANCH		Organization:	ATE									
Project Location:	SANTA MARIA	1	Performed By:	GOM									
Scenario Description:	UPDATED WITH FACTORS	1	Date:	17-Oct-23									
Analysis Year:			Checked By:	SAS									
Analysis Period:	PM Street Peak Hour		Date:	17-Oct-23									

	Table 1	-P: Base Vehicle	e-Trip Generation	Estima	ates (Single-Use S	te Estimate)	
	Developme	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
Land Use	ITE LUCs1	Quantity	Units	1 🗀	Total	Entering	Exiting
Office					0		
Retail	821/945/941	55,000	SF		541	260	281
Restaurant	930/932/934	29,750	SF	1 🗀	739	390	349
Cinema/Entertainment				1 🗀	0		
Residential	220	495	DU	1 🗀	239	151	88
Hotel				1 🗀	0		
All Other Land Uses ²	151	39,500	SF		6	3	3
					1,525	804	721

	Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use		Entering Trips			Exiting Trips		
Land USE	Veh. Occ.4	% Transit	% Non-Motorized		Veh. Occ.4	% Transit	% Non-Motorized
Office							
Retail	1.72	2%	4%		1.72	2%	4%
Restaurant	1.72	2%	4%		1.72	2%	4%
Cinema/Entertainment							
Residential	1.75	2%	4%		1.75	2%	4%
Hotel							
All Other Land Uses ²	1.72	2%	4%		1.72	2%	4%

	Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (Fram)	Destination (To)						
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel	
Office							
Retail					1200		
Restaurant					1300		
Cinema/Entertainment							
Residential		1200	1300				
Hotel							

Table 4-P: Internal Person-Trip Origin-Destination Matrix*							
Origin (From)		Destination (To)					
Origin (From)	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel	
Office		0	0	0	0	0	
Retail	0		140	0	109	0	
Restaurant	0	223		0	42	0	
Cinema/Entertainment	0	0	0		0	0	
Residential	0	31	22	0		0	
Hotel	0	0	0	0	0		

Table 5-P: Computations Summary					
	Total	Entering	Exiting		
All Person-Trips	2,625	1,385	1,240		
Internal Capture Percentage	43%	41%	46%		
	•				
External Vehicle-Trips ⁵	815	447	368		
External Transit-Trips ⁶	30	16	14		
External Non-Motorized Trips ⁶	59	33	26		

Table 6-P: Internal Trip Capture Percentages by Land Use					
Land Use	Entering Trips	Exiting Trips			
Office	N/A	N/A			
Retail	57%	52%			
Restaurant	24%	44%			
Cinema/Entertainment	N/A	N/A			
Residential	57%	34%			
Hotel	N/A	N/A			

¹Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

³Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

⁴Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made ⁵Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

⁶Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1



ASSOCIATED TRANSPORTATION ENGINEERS

100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 ● (805) 687-4418 ● (805) 682-8509-F

ACCIDENT RATE CALCULATION SHEET - FOR INTERSECTIONS

roje	ect:	Richards Ranch	File Name:	Accident Rate Worksheet 3 Year
------	------	----------------	------------	--------------------------------

 Project #:
 021069

 Analyst:
 GOM

 Date:
 11/7/2023

N/S Street: Orcutt Expressway
E/W Street: Union Valley Parkway

Weekday:

PM Peak Hour Entering Volume: 3735
Peak Hour Factor: 10.8
-----OR------

Total Approach ADT: N/A

Weekend:

PM Peak Hour Entering Volume OR ADT: 75% (as a percentage of Weekday PM Peak Hour Entering Volume OR ADT)

Period Analyzed (years): 3

Number of Accidents: 29

Million Entering Vehicle Miles: 41.02 million entering vehicle miles (mevm)

Accident Rate: .71 accidents per million entering vehicle miles (mevm)

Intersection Rate Group: 109

California State Average Collision Rate: 0.55

DEFINITIONS

Number Expected = ADT x Time x Rate Expected x Length
1000000

Number Significant = Number Expected + $(2.576 \times (Number Expected)^{1/2}))$ + 1.329

NOTES: Number Significant using 99.5% confidence level.

For intersections, use annual number of entering vehicles in place of ADT and delete length. The NR is the same as for roadway segments.

CALCULATIONS - ORCUTT EXPRESSWAY/UVP INTERSECTION (Three Year Period)

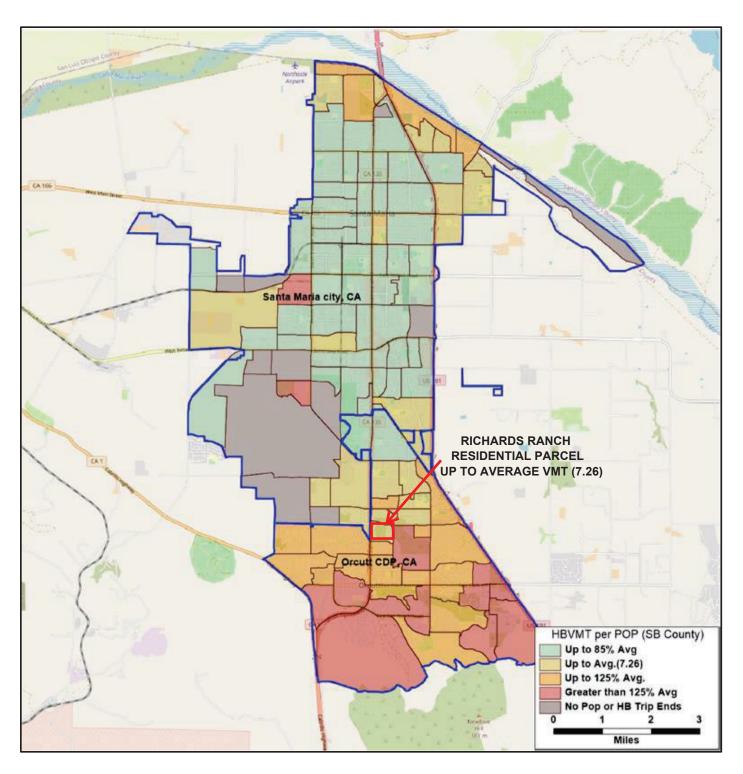
Number Expected = 13,674,634 x 3 x 0.55 x 1 = 22.5631

Number Significant = 36.1283213

Number of Accidents Recorded = 29

Santa Maria Environmental Procedures and Guidelines Appendix B

Countywide Average: Home-Based VMT per Population (Residential Land Uses)



Adopted by the City Council on November 3, 2020 (City Council Resolution 2020-111)

APPENDIX B

Santa Barbara Local Agency Formation Commission Policy Consistency Analysis

Santa Barbara Local Agency Formation Commission Policy Consistency Analysis

This appendix provides a preliminary analysis of the Richards Ranch Annexation Project's (project's) consistency with Santa Barbara Local Agency Formation Commission (SBLAFCO) policies and factors identified in SBLAFCO's letter to the City of Santa Maria, *Comments on Draft Environmental Impact Report (EIR) – Richards Ranch Annexation Project (AN2021-0001)*, dated March 6, 2023. This analysis supplements Section 4.9.2.4 and Table 4.9-4 of the Richards Ranch Annexation EIR. The EIR Table 4.9-4 lists applicable plans and policies pertaining specifically to land use and planning that were "adopted for the purpose of avoiding or mitigating an environmental effect and a preliminary evaluation of the project's consistency with the guidelines and requirements detailed therein." This approach is consistent with the State CEQA Guidelines Section 15125(d) and the environmental checklist questions in Appendix G of the State CEQA Guidelines. The CEQA interest in policy consistency is narrower than the consideration of the analysis of policy consistency that is required for the annexation to be successfully approved by the City and the SBLAFCO Commission.

This analysis does not affect the CEQA analysis for the annexation. Further, it is not the City's responsibility to determine consistency with SBLAFCO policies. For that reason, this analysis is only provided as a preliminary or potential consistency analysis. The City offers great deference to SBLAFCO in determining consistency with their own policies. In other words, different determinations by SBLAFCO may be made. SBLAFCO has unique competence to interpret their own policies when applying them.

SBLAFCO identifies the policies and factors that they request a preliminary analysis of in the above referenced letter. Table A-1 addresses the proposed project's consistency or inconsistency with these policies and factors.

Table B-1. Santa Barbara Local Agency Formation Commission Policy Consistency

SBLAFCO Policies and Factors Preliminary Consistency Determination Sphere of Influence Policies Policy 2. Community-centered urban development will be Consistent. The proposed urban infill project in the City of encouraged wherever justified on the basis of reduced cost of Santa Maria's Sphere of Influence encourages communitydesired levels of community services, energy conservation, centered development by facilitating the establishment of and preservation of agricultural and open space resources. community-serving commercial retail spaces and providing a diverse mix of housing types to meet the City's Regional Housing Needs Allocation (RHNA) targets. The site is private property, not in agricultural production, nor composed of class 1 soils. Policy 3. Districts within a city's sphere of influence should Consistent. As outlined in EIR Section 4.14, Utilities and develop plans for orderly detachment of territory from the Service Systems, the proposed development within the Sphere district or merger of the district as territory is annexed to the of Influence requires expanded utility infrastructure to support its full buildout. This includes provisions for potable water, city and should plan capital improvements according, except where the type of district services provided are not provided by wastewater, stormwater, and other utilities such as natural gas, the city. The County shall be encouraged to ensure that electricity, telephone, and cable/data service. Both onsite and development within a sphere of influence and area of interest offsite infrastructure improvements have been planned to meets City standards for public facilities and improvements by ensure acceptable levels of service and sufficient capacity for providing for City review of all County proposals within the the project's commercial and residential uses. City's area of interest. The conceptual development plan serves as a guide for scaling the necessary infrastructure improvements to cater to

the project's needs. Upon completion of these identified utility enhancements, the onsite commercial and residential uses

SBLAFCO Policies and Factors

Preliminary Consistency Determination

would have access to reliable utility services with enough capacity throughout the project's lifespan.

Furthermore, since the project entails annexation into city limits, it has been designed to align with all applicable City development and infrastructure standards. This includes adherence to building setbacks, height limits, density requirements, and other relevant criteria. By meeting these City standards, the proposed development within the Sphere of Influence ensures that it would have proper access to essential public services and utilities, promoting a sustainable and consistent development that aligns with the City's requirements.

Section 7 III Policies Encouraging Consistency with Spheres of Influence # (2). Already developed unincorporated lands located within the established sphere of influence boundary of a city and which benefit from municipal services provided by such city should be annexed to that city. Vacant land in the same position should be annexed prior to development. LAFCO recognizes that costs for serving some developed unincorporated areas, when studied independently, may exceed revenues. In other cases, revenues will exceed service costs. To the fullest extent possible, cities should develop programs that propose annexation of several areas which, if combined together, achieve a net balance in city costs

and revenues." This policy recognizes some development of

unincorporated areas may exceed revenues, but a balance is

Consistent. The proposed project involves the annexation of a vacant urban infill property located within the City of Santa Maria's Sphere of Influence boundary and adjacent to the city's border. Annexation is sought to facilitate the efficient initiation of development and utilize municipal services as per LAFCO policies.

The proposed annexation aligns with the policy that "Already developed unincorporated lands located within the established sphere of influence boundary of a city and which benefit from municipal services provided by such city should be annexed to that city. Vacant land in the same position should be annexed prior to development." The vacant status of the land and its location within the City's Sphere of Influence support the proactive approach of annexation before development, ensuring seamless integration into the existing city infrastructure and service networks.

Furthermore, the request for annexation is reinforced by the County's requirement for supplemental domestic water supplies for the site's development. The neighboring community of Orcutt and the County of Santa Barbara lack such water resources, leading to previous failed development attempts over the past two decades. The availability of a viable local supplemental water source from the City of Santa Maria makes annexation a crucial consideration to address the water scarcity challenge.

The vacant urban infill site lies on the border of the City of Santa Maria and is ready for development with annexation to the city. The neighboring unincorporated properties are not served by municipal services and do not benefit from annexation to provide further regional efficiency.

Section 7 IV Policies Encouraging Orderly Development and Preservation of Open Space Patterns # (1). The Commission encourages well planned, orderly, and efficient urban development patterns for all developing areas. Also, the county, cities, and those districts providing urban services, are encouraged to develop and implement plans and policies which will provided for well-planned, orderly and efficient urban development patterns, with consideration of preserving permanent open space lands within those urban patterns. Focus here being on implementation of plans and policies which will provided for well planned, orderly and efficient urban

needs

Consistent. Influenced by long-standing community plans dating back to 1987, the proposed post-annexation development facilitates a modernized mixed-use development that addresses essential regional needs. The project focuses on delivering neighborhood commercial services and much-needed residential housing, complemented by planned community recreational amenities within the residential areas.

The site employs efficient mixed-use planning, integrating jobs, services, and living spaces within an area already equipped with road and utility infrastructure. This approach not only enhances convenience but also minimizes infrastructure costs and environmental impacts, while simultaneously reducing travel and utility expenses, resulting in significant water, energy, and greenhouse gas savings for residents and the surrounding area.

In conclusion, the mixed-use development prioritizes community goals, promotes efficiency, and fosters a sustainable and vibrant urban environment.

SBLAFCO Policies and Factors

Preliminary Consistency Determination

Commissioner Handbook Proposal Review Factors

Factor (b). The need for organized community services, the present cost and adequacy of governmental services and controls in the area, probable future needs for those services and controls, probable effect of the proposed incorporation, formation, annexation, or exclusion and alternative courses of action on the cost and adequacy of services and controls in the area and adjacent areas.

Consistent. The project site is adjacent to the City of Santa Maria city limits. The existing road network is in place and functional. Golden State Water Company would provide water to the site provided that supplemental water is provided by the City of Santa Maria through a supplemental water agreement. These supplemental water costs are borne by the developer, not the County in unincorporated areas. Wastewater services would be served by Laguna County Sanitation, which operates on a cost-recovery basis. Laguna County has the nearest wastewater treatment plant downgradient from the project site and has capacity to accommodate project wastewater demand.

Factor (c). The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.

Consistent. The proposed project aligns with the surrounding area and is generally consistent to previously adopted plans dating as far back as 1987. Its combination of commercial and residential uses addresses crucial needs in the region. Moreover, the implementation of agrarian design and greenspaces ensures conformity with area character standards, providing desired conveniences while addressing the scarcity of services in the immediate area and emergent regional housing needs.

Factor (d). The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377

Consistent. The site is an urban infill site bordering the City of Santa Maria with significant roadway and utility infrastructure surrounding it. There are no prime soils and the site has negligible agricultural value. As demonstrated by this analysis, the proposed project and its anticipated effects would in general conform with the adopted commission policies for orderly development. The proposed mixture of commercial and residential uses would be consistent with area standards and desired conveniences lacking in the immediate area.

Policy 1. Any proposal for a change or organization or reorganization shall contain sufficient information to determine that adequate services, facilities, and improvements can be provided and financed by the agencies responsible for the provision of such services, facilities, and improvements.

Consistent. A plan for adequate services is contained within the EIR and will be provided, along with the cost of services, to LAFCO as a part of the application for annexation.

Policy 4. Proposed area can be provided all urban services by agency as shown by agency service plan and proposals would enhance the efficient provision of urban services.

Consistent. A mutual services agreement exists between the County of Santa Barbara and City of Santa Maria. A plan for adequate services is contained within the EIR and will be provided, along with the cost of services, to LAFCO as a part of the application for annexation.

Policy 6. Where possible, a single larger agency rather than a number of adjacent smaller ones, established for a given service in the same general area, will be preferred.

Consistent. The City of Santa Maria would handle all services except for water and wastewater. Both water and sewer services, provided by Golden State and Laguna County Sanitation District, respectively, are already in place. This means there would be no increase in the number or complexity of service providers. Golden State, which has utilities nearby and an existing agreement with the city, would continue to provide water services. Similarly, Laguna Sanitation has been chosen for sewer services due to topographical and efficiency reasons. Importantly, there already exists a mutual services agreement between the County and City of Santa Maria for these services.

Connecting city services to the site directly would be less costefficient, more disruptive, and would require bringing utilities over, under, or around current infrastructure. As a result, it is more practical and beneficial to utilize the existing agreements and service providers for water and wastewater.

SBLAFCO Policies and Factors Preliminary Consistency Determination Policy 7. Reorganization of overlapping and competing **Consistent.** The subject property is vacant land adjacent to agencies or the correction of illogical boundaries dividing the City of Santa Maria boundary. Annexing the property would agency service areas is recommended. The Commission not create an irrational or confusing service area boundary. encourages reorganizations, consolidations, mergers, or dissolutions where the result will be better service, reduced cost, and/or more efficient and visible administration or services to the citizens. Factor (j). The comments of any affected local agency or other Consistent. All agency comments are considered, and public agency. responses given. Factor (m). The extent to which the proposal will affect a city Consistent. The Notice of Preparation of this EIR for or cities and the county in achieving their respective fair shares annexation to the City of Santa Maria was initiated on of the regional housing needs as determined by the 2/8/2022, incorporating the proposal of 495 homes. Following appropriate council of governments consistent with Article 10.6 that, in November of 2022, the County of Santa Barbara (commencing with Section 65580) of Chapter 3 of Division 1 of designated a portion of the property for 586 theoretical housing Title 7. units in its housing element draft. If annexed, the housing count would contribute to the City of Santa Maria's RHNA requirement. Section 7 VI - Standards for Annexations to Cities **Factors Favorable to Approval** 1. Proposal would eliminate islands, corridors, or other Consistent. The project site is bordered by the City of Santa distortion of existing boundaries. Maria city limits along its entire west side. Therefore, annexation of the project site would not create an island or distort existing boundaries. 2. Proposed area is urban in character or urban development Consistent. The infill project site is situated amidst existing is imminent, requiring municipal or urban-type services. urban development and is designated as Commercial (C-2) in the Santa Barbara County Land Use and Development Code, providing retail and commercial services for the surrounding community. Additionally, the site falls within Census Urbanized Areas (2010 and 2020 U.S. Census) and is recognized as an Urban Area according to the County Adopted - Comprehensive The proposed annexation supports imminent development as an urban infill mixed-use site, aiming to enhance walkability and reduce Vehicle Miles Traveled not only within the site but also benefiting the surrounding community. The primary focus of the project is to deliver commercial services and muchneeded housing. Efficient mixed-use site planning enables the strategic integration of jobs, services, and living spaces within an area already equipped with extensive road and utility infrastructure. This approach enhances convenience, minimizes infrastructure costs, and reduces environmental impacts while leading to significant water, energy, and greenhouse gas reductions for residents within and surrounding the proposed project. In conclusion, the proposed urban infill mixed-use development demonstrates the need for annexation to facilitate the efficient initiation of development and to avail municipal services for the urban development, in accordance with LAFCO policies. The imminent nature of the development underscores the importance of annexation to ensure seamless integration into existing city infrastructure and service networks, enabling the realization of the long-planned project

in a well-coordinated and resource-efficient manner.

SBLAFCO Policies and Factors	Preliminary Consistency Determination
3. Proposed area can be provided all urban services by agency as shown by agency service plan and proposals would enhance the efficient provision of urban services.	Consistent. As described in EIR Section 4.14, Utilities and Service Systems, the project would require expanded utility infrastructure, including potable water, wastewater, stormwater, and other utilities, such as natural gas, electricity, telephone, and cable/data service. The urban areas of unincorporated Orcutt area are currently served by four service providers: 1) Golden State Water, 2) Laguna County Sanitary District, 3) County Fire Department, and 4) Community Services Area 5 (CSA-5). For all intents and purposes, the City of Santa Maria would step in for CSA-5 post-annexation. Future development of the project site would require a full range of onsite infrastructure improvements as well as several improvements that would be necessary outside of the boundaries of the 43.75-acre project site. These improvements have been scaled to provide acceptable levels of service for full buildout of the project site, using the proposed conceptual development plan as a guide.
Proposal is consistent with the adopted spheres of influence and adopted general plans.	Consistent. The project has been designed to be consistent with the adopted Sphere of Influence and would be consistent with the goals and policies in the City's General Plan with implementation of mitigation measures identified in this EIR.
5. Request is by an agency for annexation of its publicly owned property, used for public purposes.	Consistent. The project is not publicly owned property; therefore, this factor is not applicable.
Factors Unfavorable to Approval	
Proposal would create islands, corridors, or peninsulas of city or district area or would otherwise cause or further the distortion of existing boundaries.	Consistent. The project site is located within the existing Sphere of Influence and bordered by City of Santa Maria city limits along its west edge. Therefore, annexation of the project site would not create an island or distort existing boundaries.
2. The proposal would result in a premature intrusion of urbanization into a predominantly agricultural or rural area.	Consistent. The infill project site is surrounded by existing urban development and is designated as Commercial (C-2) in the Santa Barbara County Land Use and Development Code, offering retail and commercial services for the surrounding community. Additionally, the site is located within Census Urbanized Areas (2010 and 2020 U.S. Census) and is recognized as an Urban Area according to the County Adopted – Comprehensive Plan. There are no prime soils or agriculturally designated lands in the area.
3. For reasons of topography, distance, natural boundaries, or like considerations, the extension of services would be financially infeasible, or another means of supplying services by acceptable alternatives is preferable.	Consistent. The site benefits from no physical constraints in receiving urban services. Surrounding it is substantial infrastructure and services, with water and sewer conveniently nearby in preparation for the site's future development. The project necessitates connections to this readily available utility infrastructure. These planned improvements have been scaled to ensure acceptable service levels for the project's full buildout, without necessitating a significant or cost-prohibitive expansion of infrastructure.
4. Annexation would encourage a type of development in an area which due to terrain, isolation, or other economic or social reason, such development is not in the public interest.	Consistent. There are no physical constraints or social reasons that would hinder the development of this site. Since 1986, the site has been designated for mixed-use development, meeting the needs for neighborhood commercial services and housing in the area. The project plan draws inspiration from the County's Orcutt Community Plan, modernized to align with the current needs of the community. The development of the property is planned according to the long-term vision of the local community as a mixed-use site in an urban infill area.
	Additionally, the annexation addresses Orcutt Community Plan Policy WAT-02, which requires developers to purchase supplemental water from the City of Santa Maria. With the proposed annexation and development, the site inspired by the Orcutt Community Plan would provide much-needed

Policy Consistency Analysis **SBLAFCO Policies and Factors Preliminary Consistency Determination** commercial retail services and a diverse range of housing types. This endeavor not only addresses the region's demand for housing but also assists the City of Santa Maria in fulfilling its RHNA. 5. The proposal appears to be motivated by inter-agency Consistent. Based on the available information and rivalry, land speculation, or other motives not in the public preliminary inter-agency coordination efforts, the project's motivations are consistent with the LAFCO policy that aims to interest. identify and prevent proposals driven by inter-agency rivalry, land speculation, or motives not in the public interest. The provided information suggests that the project's motivations do not align with any of these factors. Location and Development Context: The proposed project site lies within the City of Santa Maria's Sphere of Influence and is contiguous with the city's western border. The site's vacant status and its potential for imminent urban infill development make it a suitable candidate for annexation. The decision to annex the site to the city is driven by the aim to achieve more efficient long-term growth by leveraging access to municipal services Water Resource Considerations: A notable factor influencing the annexation request is the region's historical lack of water resources, which has impeded the development of the site for 20 years. Despite being planned for mixed-use development for an extended period and previous attempts by various owners to develop the site over the past two decades, the lack of water resources within the county has posed a significant challenge. However, the City of Santa Maria possesses the necessary water resources to support the proposed development, making annexation a feasible solution to address the water scarcity challenge and finally bring the long-planned project to fruition. Fiscal Benefits and Regional Impact: The proposed annexation process, encompassing a tax exchange agreement, is projected to yield fiscal benefits for both the County of Santa Barbara and the City of Santa Maria. The County and City would each receive a net annual tax revenue increase from the mixed-use development. Local schools are expected to generate fees annually. Addressing Unmet Needs and Enhancing Efficiency: The development of the site has been constrained by the historical lack of water resources in the Orcutt region. This limitation has resulted in an underserved status for commercial services and unmet housing needs. Annexation to the City of Santa Maria, within its Sphere of Influence and adjacent to its border, is viewed as an efficient means to enable growth in the region, especially given the imminent development potential of the site. The city's available water resources, previously inaccessible to the site, are poised to provide the necessary support for the project's success. In conclusion, the available information suggests that the project's motivations are consistent with the public interest and do not appear to stem from inter-agency rivalry, land speculation, or motives contrary to LAFCO policies. The proposed annexation is rooted in the site's strategic location within the City's Sphere of Influence, its vacant status, its readiness for development, and its access to essential water resources. The annexation is poised to offer fiscal benefits,

6. Boundaries of proposed annexation do not include logical

service area or are otherwise improperly drawn.

community.

address unmet needs, and enhance regional efficiency, aligning with the broader objectives of the Santa Maria Valley

Consistent. The project would not change existing service

boundaries for water or wastewater services.

SBLAFCO Policies and Factors	Preliminary Consistency Determination
7. The proposal is inconsistent with adopted spheres of influence and adopted general plans.	Consistent. The project has been designed to be consistent with the City of Santa Maria Sphere of Influence and would be consistent with the goals and policies in the City's General Plan with implementation of mitigation measures identified in this EIR.

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APPENDIX C

Monarch Butterfly Technical Memoranda



4111 Broad Street, Suite 210 San Luis Obispo, California 93401 Tel 805.543.7095 www.swca.com

TECHNICAL MEMORANDUM

To: Dana Eady

Interim Director of Community Development

City of Santa Maria

110 South Pine Street, Suite 101 Santa Maria, California 93458

From: Robert MacAller, Natural Resources Senior Director

Sharif Durzi, Pollinator Ecologist

Date: June 28, 2024

Re: Monarch Butterfly Habitat Conservation and Mitigation Opportunities, Richards Ranch

Annexation Project / SWCA Project Number 70173

INTRODUCTION AND BACKGROUND

The City of Santa Maria (City), as the Lead Agency under the California Environmental Quality Act (CEQA), is preparing an Environmental Impact Report (EIR) to assess the impacts that would result from the approval of the proposed Richards Ranch Annexation Project (project). The Final EIR will provide an evaluation of the environmental effects associated with the annexation and development project and will also identify potential mitigation measures recommended to address or minimize those effects. During the review process of the Partially Recirculated Draft EIR (PRDEIR), the California Department of Fish and Wildlife (CDFW) requested that additional information regarding possible monarch butterfly (*Danaus plexippus*) mitigation and conservation measures be included in the Final EIR (CDFW 2024).

The Richards Ranch project site is in the community of Orcutt, approximately 10.5 miles east of the Pacific Ocean and 4 miles south of downtown city of Santa Maria in Santa Barbara County, California (Figure 1). The project site is adjacent to the southeastern Santa Maria city limits. Union Valley Parkway (UVP) and Orcutt Road intersect the project site, forming a four-way signalized intersection in the northwestern portion of the project site approximately 400 feet east of the UVP and State Route (SR) 135 intersection. The project site is bordered on the west by SR 135, with residential development, the recently approved Santa Maria Airport Business Park project, the Santa Maria Airport, and active agricultural lands generally located farther west of SR 135.

The project site is mostly flat, gently sloping downward from east to west. The site is mostly nonnative annual grassland and disturbed coastal scrub, and also included stands of nonnative eucalyptus and landscape trees. The site appears to have been substantially and regularly disturbed over time from UVP construction and vegetation management (mowing/discing) (SWCA 2024).

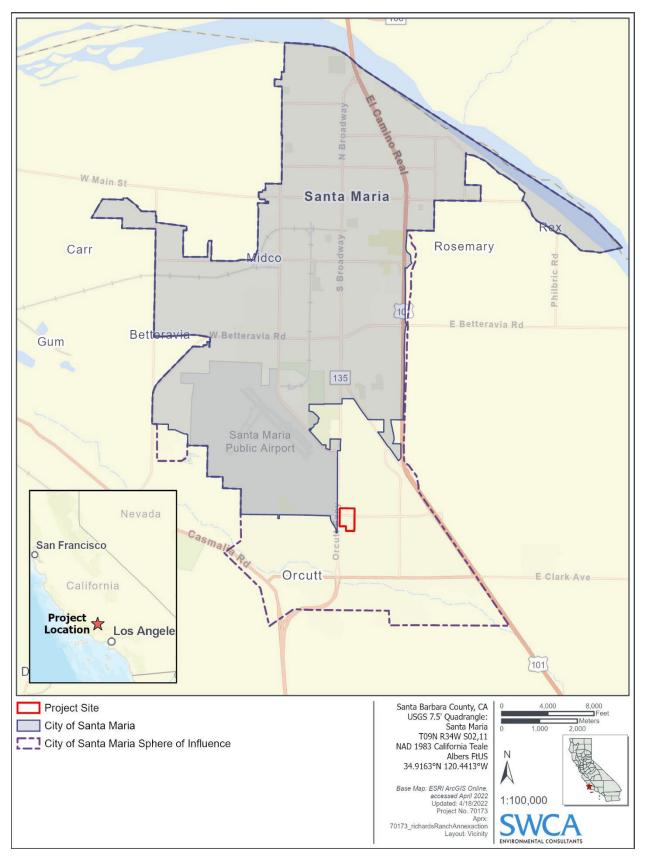


Figure 1. Project vicinity map.

The eucalyptus trees at the project site are mostly along the north and south sides of the UVP frontage and along the eastern border of the project site north of UVP. In total, there are around 100 individual eucalyptus trees in this area. There is an understory of nonnative grassland amongst the typical accumulated eucalyptus leaf litter and bark debris. The nonnative eucalyptus tree stand encompasses approximately 7.6 acres of the project site (SWCA 2024).

The monarch butterfly is a candidate for listing under the federal Endangered Species Act (FESA) and on the California Department of Fish and Wildlife's (CDFW) Special Animals list (CDFW 2022). It uses coastal woodlands and eucalyptus/pine tree stands for fall and winter roosts, typically from October through January. The 7.6-acre stand of trees at the project site has been observed with a small aggregation of fall/winter roosting monarch butterflies dating back to 1998. The Xerces Society community science program recorded 28 monarchs in November 2021, and 34 during the "Thanksgiving" counts (Xerces Society 2022). The Biological Resources Assessment prepared for the project (David Wolff Environmental, LLC [DWE] 2022) provides a detailed breakdown of the results of survey data over multiple years. Based on this, there appears to have been a sizable overwintering population in 1998, then a sharp decline to five individuals in 1999. Subsequent surveys between 2015 and 2022 yielded between 0 and 34 butterflies (DWE 2022). Based on the results of these surveys, the Xerces Society has identified the stand of eucalyptus trees along the southern side of UVP as a Western Monarch Overwintering Site (mapped as #2688).

The primary trees within the 7.6-acre grove have been previously cut down and have resprouted resulting in multi-trunk trees. In these eucalyptus trees, these trunk sprouting forms have branches with a weak attachment that can fail in high winds and are hazards to public safety. The existing grove is not maintained. Because of these hazardous conditions and the lack of existing maintenance or enhancement of the grove at the site, it is not sustainable.

Regardless of the small survey counts and the condition of the grove, CDFW has identified the grove as an inland overwintering site for monarch butterflies. The CDFW has designated the area of the project site to the south of UVP as an area of high conservation value for monarch butterflies (Area of Conservation Concern HEX ID 50049) (CDFW 2023).

According to CDFW, inland winter roosts in the Santa Maria area contain lower numbers of monarch butterflies than coastal roosts but are still biologically significant resources for this species. The inland Santa Maria overwintering sites have always been aggregations of smaller numbers of individuals but provide a valuable ecological niche to the species. Removal of smaller overwintering roosts could force the congregation of monarchs into larger colonies where stochastic events (disease, fire, grove removal, climate change) could significantly impact the species. Multiple overwintering sites that are widely distributed buffers the species against catastrophic loss and extinction. For these reasons, despite the hazardous conditions of the grove for people and/or future residents, the existing 7.6-acre overwintering site that is within the project site is currently considered significant habitat for monarch butterflies (CDFW 2023).

Development of the site under the envisioned project or any project of a similar density would necessitate the removal of the 7.6-acre monarch overwintering site that exists on the project site. The City has identified that removal of this habitat would create a significant and unavoidable impact that cannot be fully mitigated (SWCA 2024). However, to meet CEQA requirements, the City must identify and detail "rough proportionality" feasible mitigation measures to minimize the significant impact that would occur if the proposed Richards Ranch project were to be developed.

As of January 2024, and as reflected in the PRDEIR, several mitigation measures have been identified for the loss of the monarch butterfly habitat. The CDFW has expressed that they are comfortable with the current measures, except for the level of detail that is provided in the last measure, which requires the

Richards Ranch project developer to donate funding to assist with the overwintering monarch butterfly conservation goals of conservation entities; the measure does not currently identify which entities. The donation is currently envisioned as providing funding for 5 years of conservation research and/or maintenance and management activities for an area equivalent to that impacted on the project site. The CDFW requests additional details be developed for this measure (CDFW 2024).

In addition, the CDFW requests that the City further explore the potential for conservation of off-site habitat that is not on the Richards Ranch property (i.e., an off-site habitat) and that is not currently managed by a conservation organization (CDFW 2024).

PURPOSE OF THIS MEMORANDUM

The City is seeking to identify opportunities for 7.6 acres of conservation activities to support the further development of a mitigation measure to be included in the EIR, which would ultimately be the responsibility of the Richards Ranch project developer; 7.6 acres is a 1:1 ratio for the loss of the grove in the project area. SWCA believes this is an appropriate ratio as the primary trees on-site are eucalyptus and most of these have been previously cut down and have resprouted resulting in multi-trunk trees. In eucalyptus, these trunk sprouting forms have branches with a weak attachment that can fail in high winds and are hazards to public safety.

The existing grove at the project site supports an overwintering population of up to 30 monarch butterflies (0–30 based on Western Monarch Count Viewer between 2015 and 2021), average of 13.9 per year. The existing grove is not maintained and would not be maintained in the absence of the project. The grove is not sustainable and will likely, ultimately, be lost. For these reasons, funding the conservation and maintenance of an equivalent managed grove in the region at 1:1 would provide appropriate mitigation for its loss.

In summary, the purpose of this memorandum is to provide the following information to further expand the mitigation requirements included in the EIR:

- Identify the organization(s) that could be considered as recipients of conservation funding to offset impacts to the monarch butterfly habitat that would be caused by the project, including information about qualifications relative to management of lands for the benefit of monarch butterfly.
- Based on outreach to conservation organizations, quantify the amount of funding that would be required and, if possible, how the amount was calculated.
- Provide an evaluation of the feasibility of conservation of off-site habitat that is not on the Richards Ranch property (i.e., an off-site habitat) and that is not currently managed by a conservation organization. Off-site conservation opportunities should provide a "roughly equivalent" habitat value as the existing monarch grove at the Richards Ranch site. This effort includes conducting research to determine if off-site groves can be identified that can feasibly be acquired or conserved based on publicly available information.

ASSESSMENT PREPARATION

This evaluation has been conducted by SWCA biologists Robert MacAller and Sharif Durzi.

R. MacAller, a Senior Natural Resources Director at SWCA, is an accomplished restoration biologist and has been providing expertise in natural resources—related issues for over 30 years. He has spent the past two decades guiding his clients through the complexities of federal, state, and local environmental regulations to successfully complete their projects. He has managed large teams to complete challenging

projects for private developers, city and county governments, and federal agencies. As a habitat restoration expert, R. MacAller has effectively negotiated, planned, implemented, and managed mitigation projects for a variety of habitats throughout California and the Southwest. He has successfully restored habitat for numerous endangered species, including butterfly species such as the federally endangered Quino checkerspot, Palos Verdes blue, and Hermes copper butterflies and enhancement of habitats for the benefit of monarch butterfly. Additionally, R. MacAller planned and implemented the U.S. Army Corps of Engineers-funded Santa Maria River Levee ecosystem restoration project in Santa Maria.

S. Durzi is a Pollinator Ecologist specializing in conducting habitat assessments, focused foraging surveys, population studies, and development and implementation of habitat restoration for rare and sensitive pollinators and other terrestrial invertebrates. His 9 years of experience includes the management of complex projects for public and private clients across the western United States with a geographic focus in California's southern coast to the Central Valley. He regularly manages pollinator biologists and restoration ecologists to successfully implement restoration strategies for pollinator and other native species recovery. S. Durzi has experience with FESA and CESA compliance and has extensive experience managing projects at the nexus of sensitive invertebrate federal and state recovery needs.

EXPANDED CONSIDERATION OF SUPPORTING AN EXISTING CONSERVATION PRESERVE

In consultation with the City, SWCA identified several local conservation organizations looking for funding for the purchase of existing groves, assisting with current grove conservation efforts, and/or implementing up to 5 years of maintenance and monitoring for an equivalent area of approximately 7.6 acres.

SWCA reached out to conservation entities with current efforts in Santa Barbara County. Entities were chosen for outreach that are well known in the region, actively manage lands or resources for conservation, and have specific experience and/or land holdings with monarch butterfly and their habitats. Prior to any outreach, SWCA and the City discussed this approach with the CDFW for their concurrence.

SWCA gathered information from selected organizations on their ability to accept a donation from a private party, how funding could be accepted, and if funding could be applied to specific monarch butterfly conservation efforts. Specifically, these efforts would need to focus on enhancing or restoring habitats of at least 7.6 acres over a 5-year period (as this is a typical applicant funded habitat restoration success period). Funding would focus on maintenance of existing grove trees, exotic species control, native grove tree planting and/or replacement of eucalyptus trees with native tree species, planting of understories with native plant communities, general grove habitat maintenance, and/or qualitative and quantitative monitoring efforts. These efforts may otherwise contribute to improving scientific studies on monarch butterflies and their conservation in the city and/or Santa Barbara County. SWCA also inquired what amount of funding the organization would require in order to undertake these efforts for 7.6 acres over 5 years.

SWCA conducted outreach to the Xerces Society, the Land Trust for Santa Barbara County, the Rancho Maria Golf Club, and The Nature Conservancy (TNC). Table 1 lists the outreach efforts to these groups and their qualifications as appropriate conservation entities and/or land managers for monarch butterfly and general management of sensitive natural resources.

Table 1. Conservation and Local Entities Outreach Log

Entity	Contact	Date(s)	Method	Qualifications	Results
California Department of Fish and Wildlife	Kelly Fisher	5/1/2024	Teams Meeting	The CDFW provided comments on mitigation efforts for monarch butterfly on Richards Ranch and is the authority of fish, wildlife, and plant regulation in California. The CDFW is an active participant in the Western Association of Fish and Wildlife Agencies effort to enhance western monarch conservation.	There are no specific funding efforts for the applicant with the CDFW. The CDFW encouraged identifying opportunities with conservation organizations as potential mitigation, particularly the Xerces Society, Santa Barbara Land Trust, and TNC.
The Xerces Society	Emma Pelton, Sara Cuadra	5/10/2024, 5/14/2024, 5/20/2024	Phone	The Xerces Society for Invertebrate Conservation is a non-profit organization committed to the preservation of invertebrates, such as butterflies, and their natural habitats. To achieve its conservation objectives, the Xerces Society engages in partnerships with a diverse array of entities, including government agencies, academic institutions, non-profits, and private landowners. They Xerces Society provides data on overwintering monarch populations within the city.	No response as of 6/7/2024
Land Trust for Santa Barbara County	Susan (administrative contact)	5/14/2024, 5/20/2024, 6/11/2024, 6/27/2024	Phone, email	The Land Trust for Santa Barbara County is a nonprofit dedicated to conserving natural resources, agricultural land, and open spaces for future generations. It has protected nearly 30,000 acres within the county. Additionally, the Trust manages the Coronado Butterfly Preserve, which serves as a critical habitat for monarch butterflies, including during their overwintering season. This 9.3-acre preserve, featuring coastal sage scrub, eucalyptus groves, and meadows, lies adjacent to one of California's largest monarch groves.	Phone call with Alison Petro (Land Stewardship Director) on 5/20/2024. Follow-up emails sent on 5/21/2024 and 6/3/2024, and received on 6/11/2024, and 6/27/2024. A. Petro confirmed the Land Trust for Santa Barbara County has previously accepted off-site mitigation funds for overwintering monarch conservation and indicated the 9-acre Coronado Butterfly Preserve in Goleta has upcoming planned projects that may benefit from funding and expressed interest in using mitigation funds for lands acquisition. A. Petro is following up with her broader team to discuss the receiving of funds from the City of Santa Maria and was asked to provide costs associated with long-term stewardship for the Coronado Butterfly Preserve overwintering site. SWCA will connect contacts at the Dangermond Preserve with the City to further discuss opportunities to accept mitigation funding.

Entity	Contact	Date(s)	Method	Qualifications	Results
The Nature Conservancy Dangermond Preserve	Moses Katkowski	5/10/2024, 5/14/2024, 5/20/2024, 6/3/2024, 6/7/2024	Phone	TNC's Dangermond Preserve is a significant natural area located in Santa Barbara County. The preserve encompasses a diverse range of ecosystems, including coastal dunes, oak woodlands, chaparral, and wetlands, each of which supports a wide array of wildlife and plant species, including overwintering monarch butterfly populations. A primary objective of the TNC is to protect these vital habitats and maintenance of winter roost sites for monarch butterflies.	Phone call with Moses Katkowski (Stewardship Manager) on 6/3/2024. Follow-up email sent on 6/4/2024. M. Katkowski confirmed the Dangermond Preserve has only used mitigation funds from California Coastal Commission mandate resulting from violations of the previous landowner. However, M. Katkowski indicated the preserve would be interested in further mitigation funds that would come with few conditions on how to spend. Moses is following up with his broader team to discuss the receiving of funds from the City of Santa Maria and was asked to provide costs associated with long term stewardship for Dangermond overwintering site. SWCA will connect contacts at the Dangermond Preserve with the City to further discuss opportunities to accept mitigation funding.
Rancho Maria Golf Club	Mike O'Keefe	5/14/2024, 5/15/2024,	Phone	The Rancho Maria Golf Club is a privately held full-service golf club area located in the city of Santa Maria. A Xerces Society-described western monarch overwintering site occurs within the property.	Phone call with Mike O'Keefe (General Manager) on 5/14/2024 and follow-up email on 5/15/2024. Over the phone, M. O'Keefe indicated very little interest in investing in a conservation mechanism for long-term preservation of the existing eucalyptus groves on the Rancho Maria Golf Club. M. O'Keefe did not respond to follow-up email, and it was presumed the Rancho Maria Golf Club would not be a viable opportunity for investment of mitigation funds.

Based on responses from these organizations, the Land Trust for Santa Barbara County and TNC have been identified as potential recipients of funding. Both organizations currently maintain Xerces Society-described monarch overwintering sites accounting for more than 7.6 acres of contiguous overwintering groves and responded favorably to initial outreach efforts. Costs associated with funding local conservation organizations have yet to be determined, but both organizations have been asked to provide cost estimates for annual maintenance for their existing overwintering groves. Once cost estimates have been collected, SWCA will assist the City with identification of an appropriate mitigation fee to account for maintenance on at least 7.6 acres over a 5-year period.

ESTIMATING ENHANCEMENT AND RESTORATION COST

The cost to enhance or restore habitat for the monarch butterfly in the region is highly variable, depending on the condition of the property, existing resources, required planning and permits, proximity of water sources, and cost of qualified enhancement or restoration professionals to conduct planning, installation, and long-term monitoring. A general description of anticipated cost, without permitting or cost to purchase land, and assuming no earth work or extensive exotic species removal with a water source available on-site, is provided below and a per acre basis at rates typical for a private sector restoration or native landscaping company.

Estimates of Habitat Enhancement Costs

Enhancement activities would need to be conducted on properties with existing groves that could currently support monarch butterflies. Enhancement tasks for an equivalent-sized off-site property may include the following:

- minor weed removal up to four times per year;
- installation of up to twenty 15-gallon native or suitable naturalized trees per year to replace preferred overwintering eucalyptus trees, up to one hundred 1-gallon native understory species, and up to 7 acres of application of pure live seed of native understory, forb, and herbaceous species;
- hand watering;
- quarterly trash removal;
- monthly site monitoring;
- annual quantitative monitoring of grove health and monarch butterfly populations;
- annual reporting of site conditions; and
- limited public outreach.

Enhancement costs would need to also include funds for adaptive management if monitoring identifies issues (such as new weed infestation) that may impact the sustainability of the grove. Cost to conduct the above activities and to purchase trees, shrubs, and a 10% contingency would range from \$70,700 to \$91,500 per acre per year during the first 1 to 2 years of enhancement activities, with effort and cost reducing in years 3 through 5, reducing thereafter.

Estimates of Restoration Costs

Restoration activities would need to be conducted on properties with limited existing groves, with significant areas (at least 1 acre in size) requiring creation of groves. Restoration tasks may include the following:

- site preparation (access creation, weed removal, trash and debris removal)
- monthly weed removal for 2 years, and up to four times per year in subsequent years;
- installation of up to one hundred 1-gallon native or suitable naturalized trees to create preferred overwintering trees, up to one hundred 1-gallon native understory and tree species, and up to 7 acres of application of pure live seed of native understory, forb, and herbaceous species;
- installation of an irrigation system;
- quarterly trash removal;
- monthly site monitoring;
- annual quantitative monitoring of grove health and monarch butterfly populations;
- annual reporting of site conditions; and
- limited public outreach.

Restoration costs would also need to include funds for adaptive management if monitoring identifies issues (such as new weed infestation) that may impact the sustainability of the grove. Cost to conduct the above activities per acre and to purchase trees, purchase shrubs, install irrigation, and a 10% contingency would range from \$125,000 per year to \$150,000 to implement the first year, and 86,000 to 100,000 in year 2 prior to integrating into existing enhancement measures with the existing grove.

Conclusion and Limitations

The enhancement and restoration costs outlined above provide the higher end limits to implement enhancement or restoration activities for a private entity in a currently unmanaged 7.6-acre parcel. It is anticipated that conservation or government organizations with existing groves, conservation efforts, and management activities in current operation can provide these services at a reduced rate, while significantly enhancing their managed resources. The needs and subsequent costs required by these organizations will vary depending on existing conditions, stewardship priorities, and funding mechanisms.

Based on estimated costs for private entities, and available information from conservation and governmental organizations that are currently managing monarch butterfly groves, it is anticipated that appropriate and meaningful conservation funds for a five-year program would range between \$76,000 and \$275,000 for an equivalent 7.6-acre effort. However, while inquiries have been made, direct funding requirements from these organizations has not yet been received and the organizations generally indicated that it was premature to identify a funding amount at this stage of the planning process.

EXPANDED CONSIDERATION OF ESTABLISHING A NEW CONSERVATION SITE

The City conducted research to identify potential off-site groves that may be available for purchase or conservation, or restoration efforts for an equivalent of 7.6 acres. The research included identifying groves in the region currently identified as an Overwintering Site in the Xerces Society Western Monarch Count Viewer (Xerces Society 2024), calculating acreage of the groves, determining the ownership of listed groves using parcel maps in publicly available geographic information system (GIS) data, and emailing and calling owners to determine their interest in enhancing their groves for the benefit of monarch butterfly and interest in establishing conservation easements on their property.

In addition, publicly available websites, including Santa Maria Association of Realtors, Zillow, and Realtor, in conjunction with the CDFW California Natural Diversity Database (CNDDB), were used to

identify currently available listings for vacant land with identifiable eucalyptus or other monarch supporting trees, or areas that may be suitable for habitat restoration. Sites were evaluated within 3 miles of the Richards Ranch property between 3 and 15 acres in size. Each site was evaluated for potential to meet the mitigation needs of the projects and for current listing price. The projects were not evaluated for any potential zoning issues related to grove enhancement of restoration.

Potential estimated cost ranges for enhancement or restoration measures were determined at a per-acre value. The cost for establishment of a conservation easement or non-wasting endowment for long-term conservation requirements have not been calculated as these will vary considerably from project to project; however, these may be additional costs.

The City conducted research to identify potential off-site groves that may be available for purchase or conservation, or restoration efforts for an equivalent of 7.6 acres. The research included identifying groves in the region currently identified as an Overwintering Site in the Xerces Society Western Monarch Count Viewer (Xerces Society 2024). Eight Xerces Monarch Butterfly Overwintering sites were identified for analysis to provide off-site conservation opportunities within or immediately adjacent to the city of Santa Maria were identified (Table 2 and Figure 2).

Table 2. Xerces Society Western Monarch Overwintering Sites

Xerces Site ID	Owner	Decision/Action
2824	West Bay Company/Private	Eliminated from consideration. Most of this site is under active agriculture with a small eucalyptus grove on the edge. Would require substantial restoration. Private ownership
2680, 2690	Santa Maria Public Airport District/Public	Good potential for conservation efforts. Nearly 100 acres of existing trees and groves in public ownership. Surrounding open spaces. Within a Santa Barbara County facility complex. No public counts of exiting monarch butterflies provided. The City contacted Martin Pehl, General Manager of the Santa Maria Airport about the potential for future conservation and enhancement at the site on June 13, 2024; conversations are ongoing.
2691	County of Santa Barbara	Low potential for conservation efforts. Over 10 acres of existing trees and groves in public ownership. The Santa Maria Airport grove less than 0.5 to the west. Surrounding open spaces. Count of two monarchs recorded.
2819	Two private entities	Eliminated from consideration. Within a large open space, but limited grove present and large-scale restoration would be required. Private ownership.
2816	Santa Maria Country Club	Eliminated from consideration. Record immediately adjacent to structures within a golf course surrounded by urban uses. Would not be sustainable for long term. Private ownership.
2692	Rancho Maria Golf Club	Eliminated from consideration. Over 7 acres of existing trees and groves and surrounding open spaces. In private ownership.
2677	Santa Maria Valley Railroad ROW	Eliminated from consideration. Site has relatively high counts of monarch butterflies (up to 26), but the site is very narrow, less than 5 acres, and surrounded by urban land uses. Not sustainable over the long term for conservation.

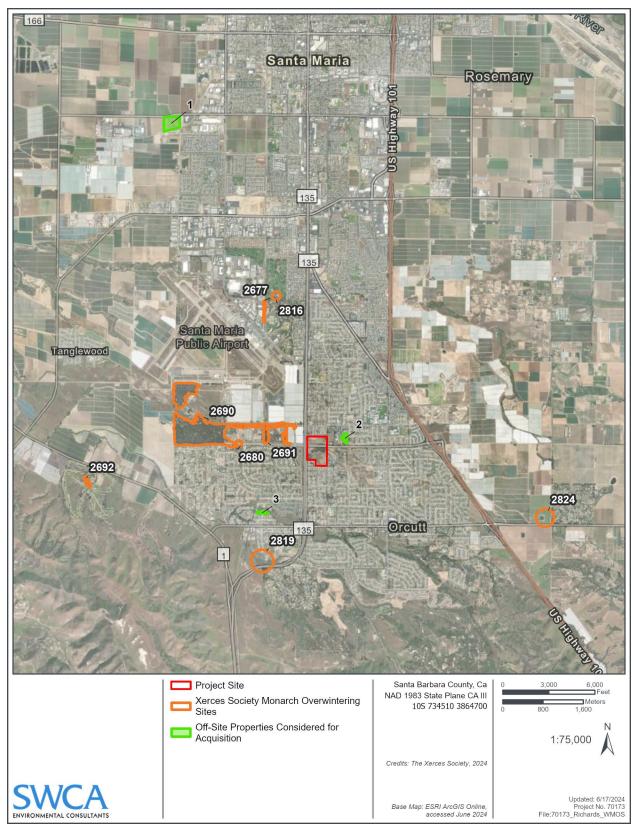


Figure 2. Nearby properties considered for enhancement, acquisition, and conservation.

Each of these sites were screened to determine if they may be appropriate for conservation efforts or should be eliminated from further consideration. A site was eliminated if it did not provide at least 6 acres of existing overwintering habitat, if it was surrounded by urban uses, or otherwise not a sustainable conservation effort. Three of the sites (Xerces Site ID 2690/2680 – Airport Complex, 2691 – California Boulevard, and 2692 – Rancho Maria Golf Course) were determined to provide good opportunities for conservation efforts with at least 7 acres of potential overwintering groves, adjacent open areas, and appropriate adjacent land uses. Each of the landowners (or their agents) of these target parcels was then contacted by phone to discuss interest in establishing conservation or enhancement efforts on their properties for monarch butterfly. The remaining four Xerces Monarch Butterfly Overwintering sites were eliminated from further consideration due to lack of existing groves, requirements for habitat restoration, small project size, and/or surrounding land uses.

In addition, publicly available websites were used to identify currently available listings for vacant land with identifiable eucalyptus or other monarch-supporting trees, or areas that may be suitable for habitat restoration when analyzed with the CNDDB. These sites are identified in Figure 2. Each available vacant property was screened to determine if it may be appropriate for conservation efforts or should be eliminated from further consideration. A site was eliminated if it did not provide at least 6 acres of existing overwintering habitat, if it did not provide at least 3.5 acres of existing overwintering habitat and did not have potential for restoration of an additional 3.5 acres, if it was surrounded by urban uses, or if an otherwise not a sustainable conservation site. Three potential properties are currently listed in the immediate regions and considered for off-site acquisition for conservation or restoration or a combination. All properties were eliminated from consideration as outlined in Table 3.

Table 3. Properties Considered for Off-site Acquisition

No. on Figure 2	Property	Description	Listing Price Total / Price per Acre	Decision/Action	
1	1550 West Stonewall Road, #18	6.14-acre property in what appears to be active agriculture adjacent to development to the east and other active agriculture otherwise surrounding the property. There are no trees on the property and full restoration would be required.	\$2,400,000 / \$390,879	Eliminated from consideration. This site has no eucalyptus habitat on the property or within the vicinity. This provides over 6 acres of land that could be restored, but would be completely isolated. The price per acre Is over \$390,000.	
2	Union Valley Parkway	3.14-acre property with an existing eucalyptus grove that could be enhanced, located less than 0.2 mile northeast of the Richards Ranch Grove.	\$2,500,000 / \$796,178	Eliminated from consideration. This site has existing eucalyptus habitat that could be enhanced with limited restoration. The overall health and quality of the existing trees is unknown. However, this only provides 3.14 acres and the price per acre is over \$796,000.	
3	North Avenue #98	1.57 acres within a narrow corridor that appears to be an existing eucalyptus Wind Break. The trees could potentially provide a grove-like habitat, but it is constrained by a road to the south with a vacant unrelated canyon parcel to the north further surrounded by development or future development. Site is located 0.5 mile north of Xerces Site 2819 (no counts recorded).	\$250,000 / \$159,236	Eliminated from consideration. This site has existing eucalyptus habitat that has potential for enhancement and open area to the north. The overall health and quality of the existing trees is unknown. This only provides 1.57 acres and the price per acre is over \$159,000.	

CONCLUSION

Conservation Funding for an Existing Preserve

Of the conservation organizations operating preserves with existing monarch overwintering groves, within the vicinity of the proposed project, two organizations were identified as potential recipients of funding for the purchase of existing groves, assisting with current grove conservation efforts, and/or implementing up to 5 years of maintenance and monitoring for an equivalent area of approximately 7.6 acres. Both organizations currently maintain monarch overwintering groves accounting for more than 7.6 acres of contiguous overwintering habitat and responded favorably to initial outreach efforts. Those two organizations and associated overwintering sites are:

- Land Trust for Santa Barbara County, manager of the Coronado Butterfly Preserve in Goleta; and
- TNC, managers of the Jack and Laura Dangermond Preserve in Lompoc.

Stewardship coordinators for both organizations discussed existing precedent for receipt of off-site mitigation funding, but when asked if they were open to receiving additional funding they indicated they would require input from larger organizational decision-making teams and would prefer to have funding without stringent conditional agreements.

The cost associated with funding local conservation organizations has yet to be determined, but both organizations have been asked to provide cost estimates for annual maintenance for their existing overwintering groves.

Overwintering Sites Not Under Existing Preservation

The City has established contact with the General Manager of the Santa Maria Airport to discuss the potential for future conservation and enhancement at the site. Currently the almost 100 acres of documented monarch butterfly overwintering habitat, denoted as Xerces Society Monarch Overwintering Groves 2680 and 2690, are not under an existing conservation preservation mechanism. Close proximity to the Richards Ranch site and large continuous acres available at the Santa Maria Airport groves provide a comparably high conservation value for mitigation funds usage then funding existing preserves located outside the city boundaries. Discussions between the City and the property owner are ongoing.

Establishing a New Off-Site Conservation Site

The costs associated with acquisition of known monarch butterfly overwintering site, enhancement and/or restoration of available lands, and long-term maintenance under a durable conservation mechanism for an equivalent acreage to the projected impact area is likely cost prohibitive based on the following findings.

Land Acquisition

Initial estimate for land acquisition ranges from \$159,236 to \$796,178 per acre. None of the sites analyzed contained enough contiguous habitat to account for all 7.6 acres of proposed disturbance and thus acquisition of lands would have to be discontinuous, presenting a possibility for agency challenges.

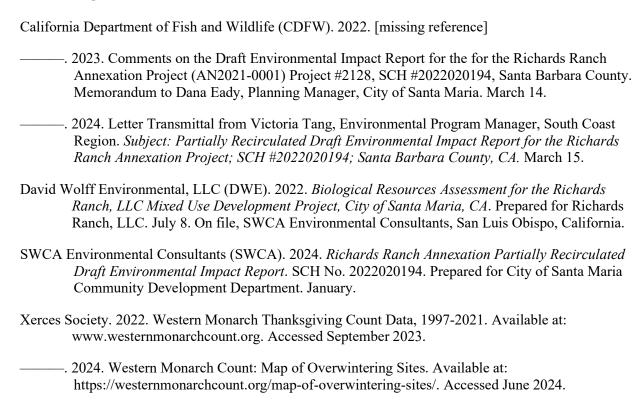
Enhancement/Restoration

Initial estimates for enhancement or restoration costs on lands acquired ranges from \$70,700 to \$150,000 per year depending on the condition of the property, existing resources, required planning and permits, proximity of water sources, and cost of qualified enhancement or restoration professionals to conduct planning, installation, and long-term monitoring. The costs associated with enhancement or restoration would likely persist for a minimum of 5 years.

Other Possible Conservation Opportunities

Given the location of the project, approximately 8 miles south of the Santa Barbara/San Luis Obispo County line, additional possible conservation opportunities exist in evaluation of existing preserves or acquisition of viable preservable, restorable, and/or lands with potential for enhancement in San Luis Obispo County. For properties to be considered viable candidates for project mitigation funding, a geographically restriction of approximately 30 to 40 miles should be applied to best approximate the geographic overwintering niche provided by the Richards Ranch project site. Any new sites considered for conservation opportunities would also need to meet the conditions set forth in this memo for supporting existing conservation sites or establishing new conservation sites.

LITERATURE CITED



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May 6, 2024

Michael D. Stoltey, MBA Managing Member Richards Ranch LLC via email

SUBJECT: MONARCH BUTTERFLY (*DANAUS PLEXIPPUS*) IMPACT AND MITIGATION ANALYSIS FOR THE RICHARDS RANCH ANNEXATION PROJECT, CITY OF SANTA MARIA, CA

Dear Mr. Stoltey:

David Wolff Environmental (DWE) is pleased to submit this response to comments on the January 2024 *Richards Ranch Annexation Partially Recirculated Draft Environmental Impact Report* (PRDEIR) prepared for the City of Santa Maria. The focus of this DWE response is the analysis of the further evaluation of the monarch butterfly (*Danaus Plexippus*) impact and mitigation as presented in the PRDEIR and comments received from the California Department of Fish and Wildlife (CDFW). DWE has prepared this analysis based mostly on information from:

- The July 8, 2022 DWE *Biological Resources Assessment* prepared for the subject project (DWE BRA).
- U.S. Fish and Wildlife Service December 17, 2020, Notice of 12-month finding for listing the monarch butterfly as threatened or endangered (USFWS Notice) (FR Vol. 85, No 243, pp. 81813-81822).
- Richards Ranch Annexation Partially Recirculated Draft Environmental Impact Report. SWCA Consultants, January 2024, prepared for the City of Santa Maria.
- California Department of Fish and Wildlife March 15, 2024 comment letter on the PRDEIR (CDFW 2024 letter).
- Xerces Society Western Monarch Count 2024 (<u>www.westernmonarchcount.org</u>)

MONARCH BUTTERFLY EXISTING CONDITIONS

The PRDEIR has adequately established existing conditions of the monarch butterfly both onsite and with a regional perspective. Table PDEIR-1 below summarizes the Western Monarch Count observation data from nine Xerces Society identified inland sites in the vicinity of the project site. No other inland sites within many miles have been identified by Xerces Society with Nipomo to the north and Lompoc to the south the nearest inland sites with observed and counted overwintering monarch butterflies. The rest of the Xerces Society counted sites are near the well-established life history of overwintering sites being near the

immediate coast supporting substantial numbers of monarch butterflies in the 100's, 1,000's, upwards of 20,000 at a single site in recent years.

The project site (Xerces Union Valley Parkway site #2688) has been observed recently over an 11-year period to support a small highly variable overwintering aggregation of 11 to 34 monarch butterflies in six of the 11 years, with 5 years with no observations of monarch butterflies. Four of the nine Xerces sites have no survey data associated with what is presumed to be mapped polygons around eucalyptus trees on private lands or in restricted areas of the Santa Maria Airport. As shown in Table PDEIR-1, four sites have recent survey data observations of 0 to 6 monarch butterflies.

	TABLE PDEIR-1 WESTERN MONARCH COUNT OBSERVATION SUMMARY IN THE VICINITY OF THE RICHARDS RANCH SITE					
SITE ID	NAME/OWNERSHIP	YEARS COUNTED	MAXIMUM	MINIMUM		
2677	Waller Park (public)	9	0	0		
2688	Union Valley Pkwy (private; project site)	11	34	0		
2689	Pioneer Park (public)	9	0	0		
2690	Airport Complex (public)	0				
2691	California Blvd. (public)	10	2	0		
2692	Rancho Maria Golf Course (private)	9	6	0		
2816	Santa Maria County Club (private)	0				
2819	Orcutt (unknown)	0				
2824	Lake Marie Estates (private)	0				

IMPACT ANALYSIS

The PRDEIR adequately detailed that the proposed project removal of eucalyptus trees would result in significant and unavoidable impacts on the small number of overwintering monarch butterflies. This significant and unavoidable finding is based largely on the CDFW comments of the regional importance and conservation value of the inland site to the monarch butterfly. The existing conditions have adequately established that the continued conservation of the overwintering western monarch butterfly population rests with the sites supporting substantially significant greater numbers of monarch butterflies over multiple widely spaced sites over multiple years despite annual fluctuations (both up and down). While the PRDEIR made findings of significant and unavoidable impacts that cannot be fully mitigated, it should be placed in the context of nearby available overwintering eucalyptus groves identified by the Xerces Society. Table PRDEIR-1 provides the Xerces Society data of both observations and non-use of identified suitable overwintering habitat within close proximity to the project site. It is not implausible to suggest that displaced monarch

butterflies (or their progeny) would find suitable nearby overwintering habitat after the project site eucalyptus stand is removed outside of the overwintering period as provided for as mitigation for project impacts. While the appropriate seasonal timing of eucalyptus removal avoids direct impacts on individual monarch butterflies substantially minimizing the impacts, the PRDEIR findings remain significant and unavoidable and offers additional mitigation measures to further reduce and compensate for the loss of monarch butterfly overwintering habitat.

MITIGATION MEASURE ANALYSIS

The PRDEIR provides for series of mitigation measures to avoid, minimize, and compensate for the significant and unavoidable impacts on overwintering monarch butterflies, recognizing that it is not feasible to fully mitigate impacts to a less than significant level.

CEQA has long-established practice supported by case law when imposing mitigation (Nolan/Dolan). Lead agencies must ensure there is a "nexus" and "rough proportionality" between the mitigation measure and the significant impacts of a project. (CEQA Guidelines § 15126.4, subd. (a)(4)(A)–(B), citing *Nollan v. Ca. Coastal Commission* (1987) 483 U.S. 825, *Dolan v. City of Tigard* (1994) 512 U.S. 374.) All mitigation must be feasible and fully enforceable, and all feasible mitigation must be imposed by lead agencies (CEQA Guidelines, § 15041). But, if any suggested mitigation is found to be infeasible the lead agency must explain why and support that determination with substantial evidence presented in their findings, and a statement of overriding considerations (CEQA Guidelines, §§ 15091 and 15093).

In summary, the PRDEIR provides a five-part mitigation measure (BIO/mm-2.1 (a-e)) to avoid direct impacts, restrict milkweed plantings (all species) as recommended by the Xerces Society to avoid disturbance to migratory patterns, onsite landscaping that favors monarch overwintering roost and nectar opportunities, and an undefined contribution to a monarch butterfly conservation effort/organization. These measures provide for a direct nexus to the impact, are feasible and enforceable by the lead agency, and meet the test of rough proportionality to the project impacts on the comparatively small aggregation of overwintering monarch butterflies.

The CDFW 2024 letter suggests that further unexplored mitigation options should be considered and imposed in the form of offsite purchase (at the very least a 2:1 ratio) and management in perpetuity of suitable habitat, or complete project redesign for onsite conservation and management of the eucalyptus grove. These mitigation recommendations are not in line with the fundamental CEQA principles and practices established in Nolan/Dolan. Specifically, CEQA Guidelines 15126.4(a)(4)(B) states in part, "Where the mitigation measure is an *ad hoc* exaction, it must be "roughly proportional" to the impacts of the project." The following establishes why the CDFW recommendations are infeasible, and thus not be imposed on the project.

- The monarch butterfly overwintering sites identified by the Xerces Society in the vicinity of the proposed project (a reasonable range of opportunities) summarized above in Table PRDEIR-1 are already in public ownership or on private lands with established commercial uses (golf courses) with minimal evidence of monarch butterfly overwintering (source: Xerces Society Western Monarch Count 2024). The lack of availability of an inland site property to purchase within reasonable proximity to the project site, in addition to the infeasible costs of such a land purchase, and typically required endowment to cover for long-term management costs, do not reflect a rough proportionality to the project impacts as described in the PRDEIR.
- Project redesign to protect in place or replace the eucalyptus grove onsite, with
 exhaustive management and setback requirements and use restrictions, is also
 infeasible and costly beyond any rough proportionality to project impacts on a small
 number of overwintering monarch butterflies. In addition to the economic loss of
 developable land on the infill project site, the general incompatibility for any
 additional landscaping under eucalyptus trees, and potentially hazardous conditions
 to development around eucalyptus trees (constant leaf, bark, seed pod, and falling
 branch debris) renders this measure infeasible and unadvisable.

Thank you very much for continuing with DWE for your biological resources consulting services.

Very truly yours,

David K. Wolff Principal Ecologist

APPENDIX D

Santa Barbara County Policy Consistency Analysis

Santa Barbara County Policy Consistency Analysis

This appendix provides a preliminary analysis of the Richards Ranch Annexation Project's (project's) consistency with goals, policies, actions, and development standards in the Santa Barbara County (County) Comprehensive Plan and the Orcutt Community Plan (OCP) that are applicable to the various components of the project and the location of Key Site 26, as defined in the OCP.

The County Comprehensive Plan and the OCP would not apply to the project if the annexation were to be approved and the City of Santa Maria (City) became the jurisdiction with authority over the project. Nonetheless, given several comments were made during the Richards Ranch Annexation Draft Environmental Impact Report (EIR) comment process requesting a policy analysis comparing the project to the County Comprehensive Plan and the OCP, this preliminary policy consistency analysis has been prepared.

This analysis does not affect the CEQA analysis for the annexation, given the City would be the regulatory authority over the project site should the annexation be approved by the City and the Santa Barbara Local Agency Formation Commission (SBLAFCO). Although policy consistency determinations would not result in direct impacts to the physical environment beyond the potential impacts identified and addressed in the EIR, the policy consistency discussion is provided for informational purposes. Further, it is not the City's responsibility to determine consistency with County policies. For that reason, this analysis is only provided as a preliminary or potential consistency analysis. The City offers great deference to the County in determining consistency with their own policies. In other words, different determinations by the County may be made if a project similar to Richards Ranch were to be proposed in the County's jurisdiction without the annexation proposal. The County has unique competence to interpret their own policies when applying them. It is also recognized that the County policies reflect a range of competing interests; the County should solely be allowed to weigh and balance their discretion to construe its policies when applying them.

The discussion below is intended to guide policy interpretation but is not intended to replace the City decision-making process. A final determination of the project's consistency with applicable City goals, policies, actions, and development standards would be made by City decision-makers when they act on the project.

SANTA BARBARA COUNTY COMPREHENSIVE PLAN

The Santa Barbara County Comprehensive Plan (Comprehensive Plan) is a long-range plan that serves as a guide for the physical development of unincorporated Santa Barbara County. The Comprehensive Plan is comprised of several topical parts or elements, including a Coastal Land Use Plan and Agricultural, Circulation, Conservation, Energy, Environmental Resources Management, Hazardous Waste, Housing, Land Use, Noise, Open Space, Seismic Safety and Safety, and Scenic Highways elements. The Comprehensive Plan also includes local community plans, including the OCP, which applies to Key Site 26.

The Comprehensive Plan includes goals, policies, and implementation measures that provide a general framework for countywide development. Table B-1 discusses the proposed project's consistency or inconsistency with the Comprehensive Plan goals, policies, actions, and development standards.

Table D-1. Santa Barbara County Comprehensive Plan Policy Consistency

Goals, Policies, Actions, and Development Standards

Consistency

Land Use Element

Land Use Development Policies

Policy 2. The densities specified in the Land Use Plan are maximums and may be reduced if it is determined that such reduction is warranted by conditions specifically applicable to a site, such as topography, geologic or flood hazards, habitat areas, or steep slopes. However, density may be increased under programs of the Housing Element.

Consistent. As described in the Richards Ranch Annexation EIR Chapter 2, Project Description, the OCP Land Use Designation of the project site is General Commercial, Office Professional and Planned Residential Development -3.3 (allows 3.3 dwelling units per acre). Zoning of the site is currently C-2, General Commercial. According to the OCP, Key Site 26 could be developed with up to 141 dwelling units and 115,626-square-feet of commercial and office space.

The proposed project includes the annexation and pre-zoning of 43.75-acres. 27.4-acres would be rezoned from the C-2 to residential zoning (R-3) to allow for the future construction of up to 400 apartment units and 95 townhomes. The remaining 16.35-acres would remain zoned as C-2 (General Commercial) under the City of Santa Maria's zoning for the future construction of up to 106,800-square-feet of retail commercial development and approximately 39,000-square-feet of mini storage. The City of Santa Maria's R-3 zone district allows up to 22 dwelling units per acre, for a maximum of 602 dwelling units on the site. The conceptual development plan includes a maximum of 495 units, or approximately 18 units per acre, which is below the maximum density for the proposed R-3 zoning. The County's recently adopted 6th Cycle Housing Element proposes to rezone the project site to C-2 and DR-30/40 (Design Residential, 30/40 dwelling units per acre) for a maximum build out potential of 750 dwelling units. The proposed project would be below the density specified in the 2023-2031 6th cycle Housing Element at 495 total dwelling units, or approximately 18 units per acre.

Policy 3. No urban development shall be permitted beyond boundaries of land designated for urban uses except in neighborhoods in rural areas.

Consistent. The project site is located within the urban boundary defined by the Orcutt Community Plan. Proposed development included in the project would occur on a site designated for urban uses.

Consistency

Policy 4. Prior to issuance of a development permit, the County shall make the finding, based on information provided by environmental documents, staff analysis, and the applicant, that adequate public or private services and resources (i.e., water, sewer, roads, etc.) are available to serve the proposed development. The applicant shall assume full responsibility for costs incurred in service extensions or improvements that are required as a result of the proposed project. Lack of available public or private services or resources shall be grounds for denial of the project or reduction in the density otherwise indicated in the land use plan.

Consistent. As discussed in the Richards Ranch Annexation EIR Chapter 2, Project Description, Section 4.12, Public Services and Recreation, Section 4.13, Transportation, and Section 4.8, Hydrology and Water Quality, adequate fire and police protection, public school capacity, water supply, roadway infrastructure, and wastewater service would be available for the proposed project, and impacts related to these services would be less than significant.

Policy 5. Within designated urban areas, new developments other than that for agricultural purposes shall be serviced by the appropriate public sewer and water district or existing mutual water company, if such service is available.

Consistent. See response to policy 4, above.

Hillside and Watershed Protection Policies

Policy 1. Plans for development shall minimize cut and fill operations. Plans requiring excessive cutting and filling may be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Policy 2. All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in open space.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. There are no known site areas with soil, geologic, flood, erosion, or other hazards onsite that would be unsuitable for development. There are no significant geological or hydrological features located on the project site. The project site supports a mixture of native and non-native trees (eucalyptus, scattered live oak trees, and a stand of ornamental trees). The future development of the site as shown in the conceptual site plan includes 106,800-squarefeet of retail commercial development, 39,500-square-feet of mini-storage development, and the construction of 400 apartments and 95 townhomes. The future development of the property shown in the conceptual site plan would result in the removal of the majority of the trees on the site, both native and non-native. Future Planned Development Permits for development of the site would be reviewed to ensure that grading is kept to an absolute minimum and that the project complies with Mitigation Measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, BIO/mm-5.1, and BIO/mm-11.1 which would be included as conditions of approval for any future development, as identified in Section 4.3, Biological Resources, of the Richards Ranch Annexation

Policy 3. For necessary grading operations on hillsides, the smallest practical area of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. The clearing of land should be avoided during the winter rainy season and all measures for removing sediments and stabilizing slopes should be in place before the beginning of the rainy season.

Policy 4. Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. All sediment shall be retained on-site unless removed to an appropriate dumping location.

Policy 5. Temporary vegetation, seeding, mulching, or other suitable stabilization methods shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized as rapidly as possible with planting of native grasses and shrubs, appropriate non-native plants, or with acceptable landscaping practices.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Future development of the property under a Planned Development Permit would require preparation of a Storm Water Pollution Prevention Plan (SWPPP) that would include the implementation of sediment basins and other sediment control methods in the initial stage of construction to control sediment runoff. These include stabilization of exposed soils within one week of exposure; avoiding construction during the rainy season; stabilizing slopes; and controlling erosion. There are no known site areas with soil, geologic, flood, erosion, or other hazards onsite that would be unsuitable for development.

Policy 6. Provisions shall be made to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained onsite whenever possible to facilitate groundwater

Consistency

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under a Planned Development Permit, the project would incorporate Best Management Practices (BMPs) for stormwater management and treatment into the overall project design, including stormwater detention facilities and groundwater treatment and replenishment facilities. The proposed project would also include on-site bio-retention facilities and Low Impact Design (LID) features in accordance with the Santa Barbara County Flood Control District (SBCFCD) stipulation that post- development peak stormwater flows not exceed pre-development flows for 2-, 5-, 10-, 25-, 50-, and 100-year storm events. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration.

Policy 7. Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under a Planned Development Permit, storm water monitoring, Best Management Practices (BMP), implementation of erosion control measures, and implementation of spill prevention and containment measures would be required for the life of the project in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements. Project construction activities would also require the installation of sedimentation traps and other BMPs to prevent erosion and siltation of waterways.

Streams and Creeks Policies

recharge.

Policy 1. All permitted construction and grading within stream corridors shall be carried out in such a manner as to minimize impacts from increased runoff, sedimentation, biochemical degradation, or thermal pollution.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under a Planned Development Permit, storm water monitoring, BMPs, implementation of erosion control measures, and implementation of spill prevention and containment measures would be required for the life of the project in compliance with NPDES permit requirements. The project would also require the installation of sedimentation traps and other BMPs to prevent erosion and siltation of waterways.

Flood Hazard Area Policies

Policy 1. All development, including construction, excavation, and grading, except for flood control projects and non-structural agricultural uses, shall be prohibited in the floodway unless off-setting improvements in accordance with federal regulations are provided. If the proposed development falls within the floodway fringe, development may be permitted, provided creek setback requirements are met and finished floor elevations are two feet above the projected 100-year flood elevation, and the other requirements regarding materials and utilities as specified in the Flood Plain Management Ordinance are in compliance.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. As discussed in Section 4.8, Hydrology and Water Quality, of the Richards Ranch Annexation EIR, the site does not contain any natural drainage or surface water features and is not located within an identified flood zone.

Consistency

Historical and Archeological Sites Policies

Policy 1. All available measures, including purchase, tax relief, purchase of development rights, etc., shall be explored to avoid development on significant historic, prehistoric, archaeological, and other classes of cultural sites.

Policy 2. When developments are proposed for parcels where archaeological or other cultural sites are located, project design shall be required which avoids impacts to such cultural sites if possible.

Policy 3. When sufficient planning flexibility does not permit avoiding construction on archaeological or other types of cultural sites, adequate mitigation shall be required. Mitigation shall be designed to accord with guidelines of the State Office of Historic Preservation and the State of California Native American Heritage Commission.

Policy 4. Off-road vehicle use, unauthorized collection of artifacts, and other activities other than development which could destroy or damage archaeological or other cultural sites shall be prohibited.

Policy 5. Native Americans shall be consulted when development proposals are submitted which impact significant archaeological or cultural sites.

Consistent. The project applications for annexation and a

General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under a Planned Development Permit, as discussed in Section 4.4, Cultural and Tribal Cultural Resources, of the Richards Ranch Annexation EIR, there are no known archaeological or other cultural resources on the project site. Adherence to Mitigation Measure CR/mm-2.1 would reduce impacts associated with the potential to unearth previously undiscovered cultural resources during grading and construction to a less than significant level and would ensure that previously unidentified cultural and tribal cultural resources would not be impacted during project construction.

Consistent. Section 4.4, Cultural and Tribal Cultural Resources, of the Richards Ranch Annexation EIR, details the Native American consultation efforts for the project. Pursuant to the requirements of AB 52 and SB 18, the City of Santa Maria conducted Native American consultation for the proposed project to identify potential concerns or issues associated with Native American cultural resources within the project vicinity. No requests for consultation were received.

Visual Resource Policies

Policy 1. All commercial, industrial and planned developments shall be required to submit a landscaping plan to the County for approval.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. The future development of the site would require a Planned Development Permit and would include preparation of a landscaping plan for review and approval by the City of Santa Maria. The project's landscaping plan would include all landscape specifications identified in the Richards Ranch Annexation EIR mitigation measures

Policy 3. In areas designated as urban on the land use plan maps and in designated rural neighborhoods, new structures shall be in conformance with the scale and character of the existing community. Clustered development, varied circulation patterns, and diverse housing types shall be encouraged.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. The project site is situated within Orcutt's established urban area. Future development on the project site would require a Planned Development Permit from the City of Santa Maria if the site were to be annexed. As part of the Planned Development Permit review, careful consideration would be given to the existing development context, ensuring a seamless integration with the surrounding properties. The southern boundary of the project is planned to include townhomes along property lines where housing already exists. This approach allows for a gradual increase in density as the project approaches Union Valley Parkway and SR 135. By thoughtfully employing multiple housing types, potential impacts on existing neighborhoods are minimized while fulfilling the region's housing needs. In terms of landscape design, future plans would be designed to soften the visual impact of the development on the site. Additionally, low-water use landscaped buffers would be included to promote environmental sustainability.

Consistency

Policy 4. Signs shall be of size, location, and appearance so as not to detract from scenic areas or views from public roads and other viewing points.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Future signage associated with build-out of the site under the conceptual site plan would be reviewed through the City's building permit process to ensure that proposed signage is sized, located and designed so as not to detract from scenic areas or views from public roads and other viewing points.

Policy 5. Utilities, including television, shall be placed underground in new developments in accordance with the rules and regulations of the California Public Utilities Commission, except where cost of undergrounding would be so high as to deny service.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. All utilities installed for future development associated with the conceptual site plan under a Planned Development Permit would be installed underground, in accordance with the rules and regulations of the California Public Utilities Commission and the project's conditions of approval.

Noise Element

Policy 1. In the planning of land use, 65 dB Day-Night Average Sound Level should be regarded as the maximum exterior noise exposure compatible with noise-sensitive uses unless noise mitigation features are included in project designs.

Policy 5. Noise-sensitive uses proposed in areas where the Day-Night Average Sound Level is 65 dB or more should be designed so that interior noise levels attributable to exterior sources do not exceed 45 dB LDN when doors and windows are closed. An analysis of the noise insulation effectiveness of proposed construction should be required, showing that the building design and construction specifications are adequate to meet the prescribed interior noise standard.

Policy 6. Residential uses proposed in areas where the Day-Night Average Sound Level is 65 dB or more should be designed so that noise levels in exterior living spaces will be less than 65 dB LDN. An analysis of proposed projects should be required, indicating the feasibility of noise barriers, site design, building orientation, etc., to meet the prescribed exterior noise standard.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. As described in Section 4.10, Noise, of the Richards Ranch Annexation EIR, the future development of the site as shown in the conceptual development plan (requiring a Planned Development Permit) would result in potentially significant impacts related to shortterm construction noise and long-term exposure to transportation and non-transportation noise. Adherence to mitigation measures NOI/mm-1.1 and NOI/mm-1.2 would ensure that short-term construction related noise is less than significant and that long-term noise associated with the project would not result in exposing residences to exterior noise levels more than the County's exterior noise standard of 65 dBA CNEL, or interior noise levels that would exceed the County's interior noise standard of 45 dBA CNEL.

Circulation Element

B. Roadway Standards:

- A project that would contribute ADTs to a roadway where the Estimated Future Volume does not exceed the policy capacity would be considered consistent with this section of this Element.
- b. For roadways where the Estimated Future Volume exceeds the policy capacity but does not exceed the Acceptable Capacity, a project would be considered consistent with this section of this Element only if the number of ADTs contributed by the project to the roadway was less than or equal to 2 percent of the remaining capacity of that roadway or 40 ADT, whichever is greater.
- c. For roadways where the Estimated Future Volume exceeds the acceptable capacity but does not exceed Design Capacity, a project would be considered consistent with this section of this Element only if the number of ADTs contributed by the project to the roadway does not exceed 25 ADT.
- d. For roadways where the Estimated Future Volume exceeds the design capacity, a project would be

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. As discussed in Section 4.13, Transportation, of the Richards Ranch Annexation EIR, the future construction of the development proposed under the conceptual plan was determined to have less than significant project-level and cumulative impacts on area roadway segments.

Consistency

consistent with this section of this Element only if the number of ADTs contributed by the project to the roadway does not exceed 10 ADT.

D. Intersection Standards:

- Projects contributing PHTs (peak hour trips) to intersections that operate at an Estimated Future Level of Service that is better than LOS C shall be found consistent with this section of this Element unless the project results in a change in V/C (volume/capacity) ratio greater than 0.20 for an intersection operating at LOS A or 0.15 for an intersection operating at LOS B.
- For intersections operating at an Estimated Future Level of Service that is less than or equal to LOS "C," a project must meet the following criteria in order to be found consistent with this section of this Flement
 - For intersections operating at an Estimated Future Level of Service C, no project must result in a change of V/C ratio greater than 0.10.
 - For intersections operating at an estimated future Level of Service D, no project shall contribute 15 or more Peak Hour Trips.
 - For intersections operating at an Estimated Future level of Service E, no project shall contribute 10 or more Peak Hour Trips.
 - For intersections operating at an Estimated Future Level of Service F, no project shall contribute 5 or more Peak Hour Trips.
- 3. Where a project's traffic contribution does not result in a measurable change in the V/C ratio at an intersection but does result in a finding of inconsistency with Intersection Standard 2 above, intersection improvements that are acceptable to the Public Works Department shall be required in order to make a finding of consistency with these intersection standards. A measurable change in V/C ratio shall be defined as a change greater than or equal to 0.01. (amended by 93-GP-12)

Housing Element

Policy 1.1. Promote new housing opportunities throughout the unincorporated county and the revitalization of existing housing to meet the needs of all economic segments of the community, including extremely low-income households, while respecting the County's rural and unique characteristics.

Policy 1.3. Promote housing opportunities near employment centers through regional and local planning efforts, including updates to the Comprehensive Plan and County Code, as well as the Regional Growth Forecast, Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), RHNA Plan 6th Cycle 2023-2031 (2023-2031 RHNA Plan), Congestion Management Plan (CMP), Active Transportation Plan, and Bicycle Master Plan.

Policy 1.4. Ensure that housing developments provide or expand on-site or community recreational opportunities to serve residents. This can include but is not limited to community or neighborhood parks, play areas, outdoor gathering/barbeque spaces, sports fields/courts, trails and walking paths, and recreational open spaces.

Consistent. The proposed project includes the annexation and pre-zoning of 43.75-acres. 27.4-acres would be rezoned from the C-2 to residential zoning (R-3) to allow for the future construction of up to 400 apartment units and 95 townhomes. These units would provide additional housing types to meet the needs of the community. The remaining 16.35-acres would be rezoned to C-2 (General Commercial) under the City of Santa Maria's zoning for the future construction of up to 106,800-square-feet of retail commercial development and approximately 39,000-square-feet of mini storage. The design of the buildings would be reviewed for conformance with the area as a part of the Planned Development Permit Process. The project site is not located adjacent to an existing employment center, but the planned retail commercial uses located on the site would provide employment opportunities. Additionally, the site is within proximity to Old Town Orcutt and the Airport Business Park planned to be developed across Highway 135 to the west of the site. The future development of the project site would include the installation of additional bus stops to connect to the Santa Maria Regional Transit System. Onsite recreational amenities for residents would also be

Consistency

Policy 1.5. Encourage housing development close to existing public services including public transit.

Policy 2.1. Encourage housing that meets the requirements of special needs households, as identified per State law, and promotes housing diversity (i.e., size, type, tenure, location, and affordability levels). These housing types include transitional housing, supportive housing, and farmworker housing among others.

Policy 3.1. Promote equal housing opportunities and locational choices for all persons in all housing types (ownership and rental, market rate and assisted).

incorporated within the residential component of the project. Quimby fees would be paid through Development Impact Mitigation Fees to support existing parks within the City.

Seismic Safety and Safety Element

Geologic and Seismic Goals

Policy 1. The County shall minimize the potential effects of geologic, soil, and seismic hazards through the development review process.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. As a part of a Planned Development Permit for future development of the site, the project would be required to comply with all applicable provisions of the California Building Code to ensure that impacts from ground shaking would be less than significant.

Policy 3. The County shall ensure compliance with State seismic and building standards in the evaluation, design, and siting of critical facilities, including police and fire stations, school facilities, hospitals, hazardous material manufacture and storage facilities, bridges, large public assembly halls, and other structures subject to special seismic safety design requirements pursuant to the California Code of Regulations, Title 24, Part 2 California Building Code.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. All components of the project, including compliance with local, State, and federal regulations, would be reviewed and approved by the City's Community Development Department Building Division to ensure that all State seismic and building standards are complied with.

ORCUTT COMMUNITY PLAN

The OCP applies to the unincorporated area of Orcutt. The OCP identifies growth projections and provides for orderly development to meet the full spectrum of housing, commercial and industrial space, roads, public facilities, and amenities for the community. Table B-2 discusses the project's consistency with the following OCP policy areas: Land Use Development, Fire Protection, Parks, Recreation Trails and Open Space, Police Protection, Schools, Sewer/Wastewater, Transportation, Water, and Visual Resources.

Table B-2. Orcutt Community Plan Policy Consistency

Goals, Policies, Actions, and Development Standards	Consistency
Land Use	
Policy LU-O-3. The County shall require that adequate resources and service capacity are available to accommodate the growth identified within this Plan.	Consistent. As discussed in the Richards Ranch Annexation EIR Chapter 2, Project Description, Section 4.12, Public Services and Recreation, Section 4.13, Transportation, and Section 4.8, Hydrology and Water Quality, adequate fire and police protection, public school capacity, water supply, roadway infrastructure, and wastewater service would be available for the proposed project, and impacts related to these services would be less than significant.
Policy LU-O-6. The Orcutt Urban/Rural Boundary shall separate principally urban land uses and those which are rural and/or agricultural in nature. This boundary shall represent the maximum extent of the Orcutt urban area and the Urban/Rural Boundary shall not be extended until existing inventories of vacant land within the urban area are nearing buildout. Boundary adjustments shall be approved only as part of a major Community Plan update.	Consistent. The project site is located within the urban boundary. The project does not propose to augment the existing urban boundary. Therefore, the proposed project would be consistent with this policy.
Residential	
Policy LUR-O-1. Consistent with the Housing Element, the County shall encourage the provision of a mix of affordable units on parcels within the Orcutt Planning Area.	Consistent. The proposed project includes the annexation and pre-zoning of 43.75-acres. 27.4-acres would be rezoned from the C-2 to residential zoning (R-3) to allow for the future construction of up to 400 apartment units and 95 townhomes. At this time, the units are planned to be market rate units but would be affordable by design. The housing units would provide additional housing types to meet the needs of the community in an area that is primarily developed with single-family residences.
Policy LUR-O-2. Future growth and development shall occur in a manner which minimizes construction related impacts on the community.	Consistent. Regulatory requirements and mitigation measures identified in the Richards Ranch Annexation EIR would reduce potential future construction impacts to less than significant levels. Implementation of these applicable regulatory requirements and measures would ensure that the project would be consistent with this policy.
Policy LUR-O-6. In order to provide community cohesiveness, new neighborhoods should be designed to provide circulation, pedestrian, bicycle and public transportation linkage to existing neighborhoods, schools, parks, and commercial areas.	Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. The conceptual plan for future development of the site includes internal circulation that connects to adjacent streets and sidewalks and allows pedestrians and bicyclists to connect to existing neighborhoods, schools, parks, and commercial areas.

Consistency

Policy LUR-0-7. County planning and maintenance efforts shall support development of safe, clean residential areas.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. The future development of the site would require a Planned Development Permit, which is a discretionary permit under the review of the Planning Commission. Project Covenants, Conditions, and Restrictions (CC&Rs) would contain requirements for maintenance of residential lots and common recreational and open space areas. The project does not include hazardous transportation design elements or features that would become a potential safety problem, or otherwise create an unsafe situation. Therefore, the project would be consistent with this policy.

Fire Protection

Policy FIRE-O-2. Fire hazards in Orcutt shall be minimized in order to reduce the cost of/need for increased fire protection services and to protect the natural resources in undeveloped open space areas.

DevStd FIRE-2.1. Development within or adjacent to high fire hazard areas should include the use of fire prevention measures such as perimeter roads, trails, Class A or B roofs, adequate access to the urban/rural interface and inclusion of structural setbacks per DevStd BIO 1.7. Fencing within the structural setback shall be comprised of fire-resistant material to minimize fire hazards.

Consistent. The project site is not located within or adjacent to a high fire hazard area. Fire protection services within the Santa Maria city limits are provided by the Santa Maria Fire Department (SMFD). SMFD operates out of six fire stations located throughout the city. SMFD also provides and receives mutual aid assistance to and from the Santa Barbara County Fire Department (SBCFD). SBCFD operates out of 16 fire stations located throughout the county. Although each agency has defined fire protection service boundaries, the established mutual aid agreements between the agencies are often enacted, allowing services to cross these jurisdictional boundaries to provide adequate fire protection services and emergency response times within the region. Both SMFD and SBCFD fire protection facilities serve the project site.

Implementation of the project would result in the annexation of the project site into the City of Santa Maria, including changing the service area boundary so that the site would be within the jurisdictional boundary of SMFD rather than SBCFD. As well, as part of the annexation process, the City would need to develop a Resolution of Application to Initiate Annexation, including Adoption of a Plan for Services. The Plan for Services would identify how the City and SMFD would serve the project site using available facilities. If the Santa Barbara County Local Agency Formation Commission provides approval of the annexation, the County and City would move to a negotiation process to identify a fair and appropriate Property Tax Sharing Agreement. It is through this process that consideration for the sharing of property tax revenues from the proposed project to support City and County services, including fire protection services, would be determined.

DevStd FIRE-2.2. The County shall require two routes of ingress and egress for development unless waived by the Fire Department.

Consistent Two routes of ingress and egress are provided on the conceptual development plan for the residential and commercial components. Therefore, the proposed project would be consistent with this policy.

Park, Recreation, Trails, and Open Space

Policy PRT-0-1: Diverse passive and active recreational activities shall be developed in Orcutt.

DevStd PRT-O-4.2. Development shall comply with the Trail Siting Guidelines as set forth in the Orcutt Multiple Use Trails Plan

DevStd PRT-O-4.3. Development on sites with identified trail corridors (Figure 14 in the OCP) shall include, where appropriate, the construction and assurance of the fitness of designated trails for two years, at which time the County Park Department would assume maintenance responsibility. Where

Consistent. The proposed project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site, therefore the proposed project would be consistent with these policies.

Future development of the site as shown in the conceptual site plan would require the discretionary approval of Planned Development Permits. Under the OCP, Key Site 26 includes an existing trail corridor and Class II bikeway along the existing Union Valley Parkway corridor. No other mapped trail corridors are planned for the area according to the OCP or County trail plans. No additional trail dedications are proposed. No additional trail dedications are proposed. If the project site is

Consistency

immediate construction is not required, a construction bond shall be required.

annexed into the City of Santa Maria, the future development of the site would occur under the City's review through Planned Development Permits. The regulations included in the OCP would not apply, however, the site would be subject to the City's General Plan policies and Municipal Code standards.

Policy OS-0-3. Private open space within designated open space corridors shall be sited, designed, and managed to protect the natural resources and/or recreation potential of these corridors, consistent with the Open Space, Park, Recreation, & Trails, and Biological Resources of the OCP.

Policy OS-0-4. Development adjacent to, or within designated open space areas, shall be sited and designed to protect and enhance the natural resources of these areas, and accommodate appropriate recreation opportunities as identified in the Parks, Recreation and Trails section of this Plan

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site, therefore the proposed project would be consistent with these policies.

Potentially Consistent (conceptual site plan): Future development of the site as shown in the conceptual site plan would require the discretionary approval of Planned Development Permits. Under the OCP, Key Site 26 includes 11.9-acres in the northeast portion of the property identified as being within the County's more restrictive "no build corridor" due to the approach zone for the Santa Maria Public Airport. As a result, this area is identified for public open space uses and is designated open space within the OCP.

The Santa Barbara County Association of Governments (SBCAG) has recently adopted a new Airport Land Use and Compatibility Plan (ALUCP January, 2023) for the Santa Maria Airport. The updated ALUCP no longer identifies this area as a "no build" zone, and instead identifies potential development that may occur within specified "Safety Zones". A portion of the site located in the northeast area is within safety zone 2, where future mini storage uses would be developed. The area identified as safety zone 4 would include residential development. These uses are not precluded in the ALUCP provided that the recommendations in the ALUCP are followed

To build the conceptual site plan within the County, a General Plan Amendment to the OCP would be required to amend the open space designation on the site. If the project site is annexed into the City of Santa Maria, the future development of the site would occur under the City's review through a Planned Development Permit. The regulations included in the OCP would not apply, however, the site would be subject to the adopted ALUCP and the City's General Plan policies and Municipal Code standards.

DevStd OS-O-4.3. No structures shall be located within a designated open space area with the exception of: related structures necessary for the provision of active and passive recreation opportunities that would not adversely affect open space areas, and flood control projects where no other method for protecting existing structures in the floodplain is feasible and where such protection is necessary for public safety (including retention basins). Culverts, crossings, roads, pipelines, fences, and bridges may be permitted when no alternative route or location is feasible, or where other constraints or site design considerations (e.g. public safety) would require such structure.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site, therefore the proposed project would be consistent with these policies.

Potentially Consistent (conceptual site plan). Future development of the site as shown in the conceptual site plan would require the discretionary approval of Planned Development Permits. Under the OCP, Key Site 26 includes 11.9-acres in the northeast portion of the property identified as being within the County's more restrictive "no build corridor" due to the approach zone for the Santa Maria Public Airport. As a result, this area is identified for public open space uses and is designated open space within the OCP.

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Consistency

provided that the recommendations in the ALUCP are followed.

To build the conceptual site plan within the County, a General Plan Amendment to the OCP would be required to amend the open space designation on the site. If the project site is annexed into the City of Santa Maria, the future development of the site would occur under the City's review through a Planned Development Permit. The regulations included in the OCP would not apply, however, the site would be subject to the adopted ALUCP and the City's General Plan policies and Municipal Code standards.

Resource Recovery

Policy RR-O-1. Resource conservation and recovery shall be implemented in Orcutt to divert the waste stream from area landfills to the maximum extent feasible.

Action RR-O-1.1. The County, in conjunction with the local waste hauler, shall continue to encourage a residential, commercial, and industrial recycling program throughout the Orcutt Planning Area, including yard waste collection, composting and conservation programs.

DevStd RR-O-1.4. Developers shall provide recycling bins at all construction sites, where collection of currently acceptable recyclable construction materials could be accommodated.

Action RR-O-1.7. To the greatest degree feasible, in new development of 20 units or greater, the developer shall work with the local recycling service to ensure that curbside recycling pick-up service is provided.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site, Waste Management currently provides curbside recycling, bin collection and separate green waste pick-up to the project area. The City estimates that implementation of a source reduction and recycling program reduces the total volume of waste generated by new development projects to less than significant. The project shall comply with construction phase waste management, including the provision of construction waste recycling bins to divert recyclable construction waste from landfill deposition to the extent feasible.

Policy RR-0-2. The County shall strive to ensure that adequate solid waste services are available to accommodate expected growth in Orcutt.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. In regard to future development of the site under the conceptual development plan. Planned Development Permits would be required to approve this future development. According to Section 4.14, Utilities and Services, of the Richards Ranch Annexation EIR, the estimated solid waste generated by this development would be 1.94 tons per day. This equates to approximately 13.58 tons of solid waste per week, which would represent a negligible amount of the Santa Maria Regional Landfill's permitted disposal rate of 6,006 tons per week. Residents and businesses within the Santa Maria city limits are required to participate in the City's solid waste collection services. The City provides voluntary recycling services to residents; 94% of City residents participate in these services. The City also provides voluntary green waste services in which yard materials collected from the green waste program are diverted from the landfill and recycled into mulch and compost (City of Santa Maria

The approved Santa Maria Integrated Waste Management Facility would alleviate the existing need for additional solid waste disposal capacity in the region. Based on the City's approved and future solid waste disposal capacity, project solid waste generation rates, and required adherence to applicable state and local waste diversion policies, solid waste generated during project construction and operation would not result in an excess of state or local standards or exceed the capacity of local infrastructure.

Consistency

Schools

Policy SCH-O-1. The County shall strive to ensure that new development fully mitigates its impacts to school facilities and does not cause school overcrowding.

Action SCH-O-1.1. The County shall require that all statutory school facilities fees established by School Districts in the Orcutt Planning Area pursuant to Govt. Code Section 65996 be paid in full prior to issuance of building permits or as agreed to by the applicant and the school district.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. As discussed in Section 4.12, Public Services and Recreation, of the Richards Ranch Annexation EIR, the proposed project as depicted in the conceptual site plan would add students to the OUSD and the SMJUHSD schools. The project would be subject to pay the state-mandated impact mitigation fees, as the amounts are determined by the school districts and the City. These fees would offset the increased demand for school services by providing funding for additional facilities to serve the area. Section 65995(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998) states that payment of statutory fees "...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization." Therefore, in conjunction with other plans and funding sources used by the school districts, the payment of the state-mandated impact mitigation fees would ensure that the effects of the project on the provision of school services would be less than significant.

Wastewater

Policy WW-O-2. Prior to discretionary approval of a new development, the County shall make a finding that there will be adequate capacity and availability for LCSD to serve the new development.

DevStd WW-O-2.1: Prior to the discretionary approval of new development, the developer shall identify all additional facilities required to adequately collect, convey, treat and dispose of the sewage effluent from the development.

DevStd WW-O-2.3: A "Can and Will Serve Letter" from LCSD will be found adequate for recording of maps or issuance of land use permits (including permits for development of preexisting lots) only if the letter demonstrates:

- LCSD's effluent, including the effluent from the proposed project, will not exceed the discharge standards established by the Regional Water Quality Control Board:
- Adequate disposal capabilities exist at the plant or through agreement with the City of Santa Maria (providing that treatment and disposal by the City does not further degrade the underlying groundwater quality) to serve the project(s); and
- Existing or planned and funded transmission lines have available capacity to serve the project(s).

DevStd WW-O-2.4. At the time of discretionary approval, the County shall condition the recordation of the final map or issuance of LUP's on provision of an adequate "Can and Will Serve" letter from LCSD.

DevStd WW-O-3.3. At the time of discretionary project approval, the County shall make a finding that the project's effluent will meet RWQCB discharge standards.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Future development of the site shown in the conceptual site plan would require the discretionary approval of Planned Development Permits. As discussed in Section 4.12, Public Services and Recreation, of the Richards Ranch Annexation EIR, the Laguna County Sanitation District (LCSD) has adequate capacity within their collection system and treatment facilities to accommodate the new development and has issued an intent to serve letter indicating that they can and will serve future development of the site. The project would not cause the LCSD plant to exceed 75 percent of its existing design capacity. As required by this development standard, the proposed project would not exceed the RWQCB discharge standards.

Consistency

Transportation

Policy CIRC-O-4. A determination of project consistency with the standards and policies of the Orcutt Community Plan Circulation Section shall constitute a determination of consistency with LUDP#4 with regard to roadway and intersection capacity.

Policy CIRC-O-3. The County shall maintain a minimum Level of Service (LOS) C or better on roadways and intersections within the Orcutt Planning Area, except that minimum LOS shall be "D" for the following roadway segments and intersections: Foster Road/Hwy 135, Lakeview Road/Skyway Drive, Stillwell Road/Lakeview Road, and all the Clark Avenue roadway segments and intersections between Blosser Road on the west and Foxenwood Lane on the east.

Policy CIRC-0-9. Development shall be sited and designated to provide maximum access to non-motor vehicle forms of transportation, including well designed walkways, paths and trails between residential development and adjacent and nearby commercial uses and employment centers, where feasible.

Policy CIRC-0-10: Developers should be encouraged to pursue innovative measures to fully mitigate transportation impacts associated with their projects.

Policy CIRC-O-11: If it is determined that a project may cause significant traffic impacts which generate the need for offsite traffic improvements that are not identified in the then current OTIP, the County shall condition any approval of the project to ensure that those improvements are funded and completed before issuance of final inspection.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the Orcutt Transportation Improvement Plan (OTIP) identifies longterm public improvements to roadways and alternative transportation facilities targeted to provide for acceptable levels of service on roadways and intersections within the Orcutt Planning Area. The OTIP requires fees for transportation impacts caused by new development in the Orcutt Planning Area. These fees may be used for roads, pedestrian facilities, transit and bicycle facilities. If the project were to be developed in the County, the project applicant would be required to contribute fair share OTIP transportation fees to offset project contributions to traffic impacts, and circulation systems maintenance, including the project's fair share of offsite improvements in an amount determined by the County Public Works Transportation Division, based on adopted fee schedules at the time of payment. As discussed in Section 4.13, Transportation, of the Richards Ranch Annexation EIR, the future construction of the development proposed under the conceptual plan was determined to have less than significant project-level and cumulative impacts on area roadway segments. The future residential development on the site would be designed to include walkways, paths, and trails between residential development and adjacent and nearby commercial uses and employment centers, where feasible.

Groundwater

Policy WAT-O-2. In order to be found consistent with Land Use Development Policy No. 4 (LUDP#4), the water demand of new discretionary development must be offset by long-term* supplemental** water supplies that do not result in further overdraft of the local groundwater basin and that are adequate to meet the project's net water demand as determined by the County considering appropriate reliability factors as determined by County Water Agency.

- * "long-term" means permanent source of water for development.
- ** "supplemental" water means a source of water other than groundwater, unless: 1. the groundwater basin has been determined to be no longer in overdraft, or 2. The use of groundwater is consistent with the final water rights judgment entered in the Santa Maria Groundwater Basin adjudication (Santa Maria Valley Water Conservation District v. City of Santa Maria, et al., Santa Clara County Superior Court Case No. CV 770214).

Amended by Res. 01-225, 7/10/01

DevStd WAT-O-2.1. Prior to discretionary action by any County decision-maker on new development, the applicant shall provide one of the following:

- A "Can and Will Serve" letter from California Cities Water Company dated before July 1997;
- An "Intent to Serve" letter from California Cities
 Water Company or other water purveyor(s) including
 draft contract(s), if any, demonstrating to the
 County's satisfaction that the development's net
 water demand will be offset by a long-term
 supplemental water supply and that the

Potentially Consistent. The application includes a request to annex the project site from the unincorporated area of Santa Barbara County into the City of Santa Maria City limits. No development applications are proposed at this time. Future development on the site would be served by Golden State Water Company. Golden State Water Company has issued a Preliminary Can and Will Serve letter stating that Golden State Water Company will be able to provide domestic and fire protection water service to the site. According to the letter, Golden State Water Company does not currently have available any additional supplemental water supply sources that satisfy the County's supplemental water requirement. Supplemental water is purchased through the City of Santa Maria, and is provided at the discretion of the City through a supplemental water agreement with the applicant.

Consistency

development will have a continuing right to obtain water equal to that of the water purveyor's other customers. Contract(s), if any, must include terms consistent with the requirements of DevStd WAT-O-2.2.

DevStd Wat-0-2.2. Prior to discretionary action on new development, the applicant must demonstrate adequacy of the water supply proposed to serve the project, unless the applicant has satisfied DevStd WAT-O-2.1 #1 above. This demonstration shall be based on the following information, which must be provided prior to application completeness:

Potentially Consistent. See response to Policy Wat-O-2.

Resources

- Provide information on project's projected gross and net demand for water. The supplemental water supply must offset the project's net water demand.
- Documentation of the reliability of the proposed water supply as projected by the Department of Water Resources (for State Water) and confirmed by the County Water Agency.
- A description of how the project will be served during drought periods. If conjunctive use of the Santa Maria Groundwater Basin is planned, demonstration that use of the basin will not contribute to long-term groundwater overdraft considering drought periods. The factual determination of overdraft contribution shall be made by the Planning & Development Department and County Water Agency.
- Provide a factual demonstration that the water purveyor has available, firm, long-term reliable water supplies which equal or exceed present demand from existing customers, projects approved for new service, and the proposed project under County review. The demonstration should also show that the project use would not contribute to overdraft of the basin. The factual determination of no additional overdraft shall be made by Planning & Development and County Water Agency.
- Provide information on the water purveyor's existing and projected range of potential State Water and/or other supplemental water delivery amounts needed for full buildout under the water purveyor's management plan, status of conservation programs, drought buffers, and groundwater pumpage consistent with applicable state government code requirements on water reporting. Provide information on the most recent annual water deliveries from various sources in the purveyor's service area, as available from existing reports.

Facilities

- Documentation of the facilities necessary to deliver water and demonstration of permanent access to the facilities such that uninterrupted service would be provided. The documentation must include a list and description of facilities, site plans, capacity and capital costs necessary to distribute water to the project.
- Demonstration that capital costs associated with providing service to the new development will not impact existing Orcutt development.
- Demonstration that the water supply project is designed, approved, funded and scheduled for implementation prior to tract map recordation or land use clearance.

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 Describe approvals and entitlements necessary for the proposed water supply and delivery system.

DevStd Wat-0-2.3. Prior to map recordation or land use clearance, the developer must provide a Can and Will Serve letter and necessary final contract(s) consistent with the conditions of the discretionary permits and terms of the draft contract(s).

Air Quality

Policy AQ-0-1. The County shall encourage land use planning and development design which reduces air pollution through development of transportation infrastructure supportive of alternative modes of transportation and pedestrian oriented developments.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project would not adversely affect any offsite bike routes or park and ride facilities. The proposed project would include new bus stops to connect to existing transit and would connect to existing and future bicycling infrastructure in the Orcutt area by way of Union Valley Parkway and Orcutt Road. Therefore, the proposed project would be consistent with this policy.

Policy AQ-0-2. Significant fugitive dust and PM₁₀ emissions shall be reduced through implementation of appropriate construction restrictions and control measures, consistent with standards adopted by the Board.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, Section 4.2, Air Quality and Greenhouse Gas Emissions, of the Richards Ranch Annexation EIR, identifies mitigation measures that would require the project to implement standard dust and emissions control measures required by the SBCAPCD, which would ensure that construction-related air quality impacts are less than significant. Therefore, the proposed project would be consistent with this policy.

Policy AQ-0-3. The County should promote the use of alternative fuels, solar energy systems, and the use of construction techniques which are designed to conserve energy and minimize pollution in Orcutt, consistent with, but not limited to the provisions of the CA Building Code.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, Section 4.2, Air Quality and Greenhouse Gas Emissions, of the Richards Ranch Annexation EIR, identifies mitigation measures that would require the project to implement design features to encourage the use of alternate transportation modes and reduce mobile-source emission. Construction of the project would also be required to comply with the California Energy Efficiency Standards for Residential and Nonresidential Buildings and CALGreen (California Code of Regulations Title 24, Parts 6 and 11). This code requires the provision of electric vehicle charging stations, water- efficient plumbing fixtures and fittings, recycling services, and other energy-efficient measures.

Biological Resources

Policy BIO-0-1. Important natural resources in Orcutt, including sandhill chaparral, central dune scrub, wetlands, oak trees and woodland, Bishop pine forest, specimen trees, and central sage scrub shall be protected, consistent with the Open Space Plan and the standards below, unless this would prevent reasonable development of a property.

DevStd BIO-O-1.1. Development shall be sited and designed to avoid disruption and fragmentation of significant natural resources within and adjacent to designated undeveloped natural open space areas, minimize removal of significant native vegetation and trees, preserve wildlife corridors and provide reasonable levels of habitat restoration. Where possible, significant natural resources, such as specimen

Consistent. The proposed annexation application and General Plan Amendment and Rezone would not result in direct physical development or impacts to biological resources.

Potentially Consistent (Conceptual Site Plan). As discussed in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR, the development of the site as shown on the conceptual site plan would result in significant and unavoidable impacts to the monarch butterfly as a result of the removal of onsite eucalyptus trees which have been identified as Monarch overwintering habitat by the California Department of Fish and Wildlife. The EIR identifies mitigation measures BIO/mm-1.1 through BIO/mm-1.5, and BIO/mm-2.1 which would require the project to minimize impacts to monarch butterflies to the extent possible, however impacts would remain significant and

trees, adjacent to designated, natural undeveloped open space corridors should be preserved.

DevStd BIO-O-1.2. Development within or adjacent to designated natural open space areas shall be reviewed for, and required to implement, habitat restoration where sitespecific impacts require restoration. If restoration on or near the site is not feasible, acquisition and preservation of additional habitat acreage should be considered, as a last resort if no other like-kind habitat mitigation options are available, payment into a mitigation bank program within the OPA that is acceptable to the County as provided for by new DevStd BIO-O-1.8. Mitigation and restoration plans should identify acreage impacted, replacement ratios, success criteria, remedial measures, and funding and responsibility for long-term maintenance and monitoring. All such restoration projects shall utilize native plants derived from local (Orcutt) seed and cutting stock, or as deemed biologically acceptable by a County qualified biologist. Wildlife relocation should be avoided. However, any wildlife relocation should be coordinated with Fish and Game and be consistent with applicable State standards.

DevStd BIO-O-1.3. Landscaping for development on the edge of designated natural undeveloped open space areas shall include native trees and shrubs, with habitat restoration efforts focused on buffers. Planting of highly invasive weedy plants (e.g., iceplant. pampas grass, veldt grass, monterey pine, eucalyptus, spiny clotbur, and Australian fireweed) shall be prohibited within 500 feet of natural undeveloped open space areas as designated on the Open Space map ([OCP] Figure 20).

Policy BIO-O-2. Consistent with necessary flood control practices, natural stream channels and riparian vegetation in Orcutt shall be maintained in an undisturbed state in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts, unless this would prevent reasonable development of a property.

Policy BIO-O-3. Established native trees in designated open space areas shall be protected. Established native trees in developable areas shall be incorporated into the site landscaping plan to the greatest degree feasible except where it would interfere with reasonable development of a property. Native trees shall be considered established if they are six feet in height.

DevStd BIO-0-3.1. To the maximum extent feasible, development shall be designed to avoid damage to native trees (e.g., oaks) by incorporating setbacks, clustering, or other appropriate methods. Areas protected from grading, paving, and other disturbances shall include the area 6 feet outside of established native tree driplines, unless this distance would interfere with reasonable development of a property. Where native trees are removed, they shall be replaced in a manner consistent with County standards.

Policy BIO-0-4. Non-native trees (e.g., eucalyptus groves and windrows) that provide known raptor nesting or key roosting sites shall be protected; non-native specimen trees shall be protected to the greatest degree feasible except where it would

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unavoidable. A Statement of Overriding considerations would be required to approve the future build out of the site as shown in the conceptual site plan. The remaining impacts to biological resources would be less than significant with the incorporation of mitigation measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, BIO/mm-5.1, and BIO/mm-11.1. With adoption of the statement of overriding considerations, and implementation of the mitigation measures described above, the build-out of the site as shown in the conceptual site plan would be consistent with this policy and development standards.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, a Storm Water Pollution Prevention Plan (SWPPP) would be required that would include the implementation of sediment basins and other sediment control methods in the initial stage of construction in order to control sediment runoff. In addition, the project would include on-site bio-retention facilities and Low Impact Development (LID) features designed to comply with these requirements. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, As discussed in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR, the project would have a less than significant impact to onsite trees with the implementation of mitigation measure BIO/mm-11.1 requiring a tree protection and replacement plan.

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interfere with reasonable development of a property. Nonnative trees of less than 25 inches in diameter at breast height do not qualify as specimens for this Policy.

DevStd BIO-0-4.1. Where non-native specimen trees are removed for development the County should consider replacement with native trees.

Policy BIO-O-5. New facilities in Orcutt, including roads, bikepaths/trails, sewer lines and retention basins, shall to the maximum extent feasible be sited and designed to avoid disruption of significant natural resources within designated natural undeveloped open space areas, minimize removal of significant native vegetation and trees and provide for reasonable levels of habitat restoration for significant habitats disrupted by construction.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site.

Potentially Consistent (Conceptual Site Plan). As discussed in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR, the development of the site as shown on the conceptual site plan would result in significant and unavoidable impacts to the monarch butterfly as a result of the removal of onsite eucalyptus trees which have been identified as Monarch overwintering habitat by the California Department of Fish and Wildlife. The EIR identifies mitigation measures BIO/mm-1.1 through BIO/mm-1.5, and BIO/mm-2.1 which would require the project to minimize impacts to monarch butterflies to the extent possible, however impacts would remain significant and unavoidable. A Statement of Overriding considerations would be required to approve the future build out of the site as shown in the conceptual site plan. The remaining impacts to biological resources would be less than significant with the incorporation of mitigation measures BIO/mm-1.1 through BIO/mm-1.5, BIO/mm-2.1, BIO/mm-3.1, BIO/mm-4.1, BIO/mm-5.1, and BIO/mm-11.1.

DevStd BIO-O-5.6. Excavated fill for retention basin construction shall not be placed within important natural resource areas. Areas adjacent to or within habitats which are disturbed during construction shall be revegetated with appropriate native species. All sensitive habitat areas adjacent to proposed detention basins shall be fenced before grading begins to prevent disturbance and stockpiling in these areas.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Future development of the site has shown in the conceptual site plan would require preparation of a SWPPP that would include the implementation of sediment basins and other sediment control methods in the initial stage of construction to control sediment runoff. Future construction of the site would be completed in accordance with the mitigation measures addressing biological resources as identified in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR.

Flooding and Drainage

Policy FLD-0-1. Flood risks in the Orcutt planning area shall be minimized through appropriate design and land use controls.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. The entire project area is outside the 100-year and 500-year floodplain of Orcutt Creek. Future development of the site under the conceptual site plan would include on-site bio-retention facilities and LID features in accordance with the SBCFCD stipulation that postdevelopment peak stormwater flows not exceed predevelopment flows for 2-, 5-, 10-, 25-, 50-, and 100-year storm events. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration. Compliance with existing design guidelines, applicable SBCFCD requirements for postdevelopment peak stormwater flows and BMPs and maintenance requirements would ensure that potential flooding impacts and impacts to on- site and off-site drainage would be less than significant.

Consistency

DevStd FLD-O-1.2. No structures or other development (except for bridges, culverts and flood control requirements) shall be allowed within creek channels.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the proposed project does not include development within creek channels.

DevStd FLD-O-1.3. No development shall be permitted within the floodplain of Orcutt, Pine Canyon or Graciosa Creeks unless such development would either be necessary to:

- Permit reasonable development of the site and would not lead to disturbance or removal of significant riparian/wetland vegetation; or
- Accomplish a major public policy goal of the Orcutt Community Plan.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project site is not located within the flood plain of Orcutt, Pine Canyon, or Graciosa Creeks.

Policy FLD-0-2. Off-site runoff associated with development should be minimized.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project would include on-site bio- retention facilities and LID features designed to comply with SBCFCD requirements. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration. Compliance with existing design guidelines, applicable SBCFCD requirements for post-development peak stormwater flows and BMPs and maintenance requirements would ensure that potential flooding impacts and impacts to on-site and off-site drainage would be less than significant.

DevStd FLD-O-2.1. Pervious construction materials, such as turf block, non-grouted brick, and gravel, shall be used where feasible.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, review of the project would determine whether materials such as turf block, non-grouted brick and gravel are appropriate for use through coordination with the public works department. The project would include on-site bio-retention facilities and LID features designed to comply with the SBCFCD stipulation that post- development peak stormwater flows not exceed predevelopment flows for 2-, 5-, 10-, 25-, 50-, and 100-year storm events. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration. Compliance with existing design guidelines, applicable SBCFCD requirements for postdevelopment peak stormwater flows and BMPs and maintenance requirements would ensure that potential flooding impacts and impacts to on- site and off-site drainage would be less than significant.

Policy FLD-O-3: Short-term and long-term erosion associated with development shall be minimized.

DevStd FLD-O-3.1. Development projects shall incorporate sedimentation traps to minimize the erosion of soils into natural and manmade flood control drainages, where feasible. All development adjacent to stream channels shall be required to install check dams as deemed appropriate by Flood Control and Planning & Development to minimize channel downcutting and erosion. To the maximum extent feasible, all such structures shall be designed to avoid impacts to creek vegetation.

Consistent. Storm water monitoring, Best Management Practices (BMPs), implementation of erosion control measures, and implementation of spill prevention and containment measures would be required for the life of the project in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements. The project would also conform to OCP Dev Std FLD-O-3.1 and FLD-O-3.2, which require the installation of sedimentation traps and other BMPs to prevent erosion and siltation of waterways.

Goals, Policies, Actions, and **Development Standards** Consistency DevStd FLD-O-3.2. Silt fencing, straw bales, sand bags, and sediment basins shall be used in conjunction with other methods to prevent erosion on slopes and siltation of the stream channel. Geology, Topography, and Soils Policy GEO-O-1. Development shall be sited to avoid Consistent. The project applications for annexation and a geologically hazardous areas. General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project would be required to comply with all applicable provisions of the California Building Code to ensure that impacts from ground shaking would be less than significant. DevStd GEO-0-1.1. New construction shall be set back a Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in minimum of 50 feet from all known active or potentially active direct physical development of the site. Regarding future faults which have been mapped. development of the site under the conceptual site plan, no active faults are located on the project site or in the vicinity of the project site. Implementation of Mitigation Measures GEO/mm-2.1, GEO/mm-2.2, and GEO/mm-2.3, as identified in Section 4.6, Geology & Soils, of the Richards Ranch Annexation EIR, would further ensure that impacts from potential ground shaking would be less than significant. Policy GEO-O-2. In areas of high erosion potential, Consistent. The project applications for annexation and a development shall be sited and designed to minimize General Plan Amendment and Rezone would not result in increased erosion. direct physical development of the site. Regarding future development of the site under the conceptual site plan, implementation of Mitigation Measure GEO/mm-5.1 identified in the Richards Ranch Annexation EIR would reduce impacts associated with the potential for soil erosion and sedimentation into drainages resulting from buildout of the project to as less than significant level. DevStd GEO-O-2.1. Consistent with Hillside and Watershed Consistent. The project applications for annexation and a Policy #1, excessive grading for creation or enhancement of General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future views shall not be permitted. Where new roads and driveways would require substantial grading, development shall be sited development of the site under the conceptual site plan, the proposed project would not grade to enhance or create views close to existing access roads. or result in grading on slopes of 20% or greater. DevStd GEO-O-2.2. Development shall be prohibited on slopes greater than 30% unless this would prevent reasonable development of a property. In areas of unstable soils, highly erosive soils or on slopes between 20% and 30% development shall not be allowed, unless an evaluation by a qualified professional (e.g., soils engineer, geologist, etc.) establishes that the proposed project will not result in unstable slopes or severe erosion or this would prevent reasonable development of a property. DevStd GEO-O-2.3. To aid in erosion control, existing hillside Consistent. The project applications for annexation and a topography, large stands of trees, and natural flood channels General Plan Amendment and Rezone would not result in shall be preserved, unless this would prevent reasonable direct physical development of the site. Regarding future development of a property. development of the site under the conceptual site plan, as discussed in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR, the project would have a less than significant impact to onsite trees with the implementation of mitigation measure BIO/mm-11.1. These measures to mitigate potential impacts to biological resources on the project site would also aid in erosion control. In addition, adherence to a Storm Water Pollution Prevention Plan (SWPPP) would

minimize exposed soils; avoid construction during the rainy

season; stabilize slopes; and control erosion.

Consistency

DevStd GEO-O-2.4. All surface water runoff shall be culverted and diverted to avoid erosion of exposed slopes and shall be directed to the nearest natural drainage channel. Where such measures are feasible and would not substantially increase erosion, vegetated earthen channels should be substituted for culverts. Cribwalls or other methods should only be used where necessary to retain slopes.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project would include on-site bio- retention facilities and LID features designed to comply with SBCFCD requirements. The proposed retention facilities would reduce peak flows, with overflow captured in desilting/retention basins. The proposed LID features would divert drainage to landscaped areas to promote infiltration. Storm water monitoring, Best BMP, implementation of erosion control measures, and implementation of spill prevention and containment measures would be also required for the life of the project in compliance with NPDES permit requirements. The project would also conform to OCP Dev Std FLD-O-3.1 and FLD-O-3.2, which require the installation of sedimentation traps and other BMPs to prevent erosion and siltation of waterways.

DevStd GEO-0-2.6. All landscape plans shall be reviewed by P&D to ensure revegetation of graded areas in areas of sandy soils. Landscape securities shall be required unless expressly waived by P&D.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the project would include preparation of a landscaping plan, consistent with the requirements of this policy. The project landscape plan would include all landscape specifications required.

Policy GEO-O-3. No grading in excess of 50 cubic yards (combined cut and fill) shall be permitted within areas designated open space in the Orcutt Community Plan without an approved Grading Permit. This requirement applies to all grading activity (including activities otherwise exempted under County Grading Ordinance 3937, Sections 14 6 and 14 8). This requirement shall not apply to the emergency activities of a public agency, including but not limited to wildfire and/or flood control.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, project construction activities would require a grading permit and an Erosion and Sediment Control Plan.

History and Archaeology

Policy HA-O-1. Archaeological and historic resources in the Orcutt Planning Area shall be protected and preserved to the maximum extent possible.

Consistent. No structures or formal landscape features identified as historic resources currently exist on the project site, and there are no known archaeological or other cultural resources on the project site. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, Mitigation Measure CR/mm-2.1 as identified in Section 4.4, Cultural and Tribal Cultural Resources, of the Richards Ranch Annexation EIR, would reduce impacts associated with the potential to unearth previously undiscovered cultural resources during grading and construction to a less than significant level.

DevStd HA-O-1.1. Development on Key Sites that have not been surveyed by a County-qualified archaeologist should be surveyed and mitigated in accordance with State and County archaeological and historic guidelines.

Consistent. As discussed in Section 4.4, Cultural and Tribal Cultural Resources, of the Richards Ranch Annexation EIR, the project site (Key Site 26) was surveyed for the presence of cultural and historic resources on February 14, 2022. No archaeological resources were identified. Additionally, according to the OCP, the area has a low probability of containing archaeological resources due to the distance from water and blufftops. Mitigation Measure CR/mm-2.1 from the EIR would reduce impacts associated with the potential to unearth previously undiscovered cultural resources during grading and construction to a less than significant level.

Policy NSE-0-1. Development of new noise sensitive uses (as defined in the Noise Element) in Orcutt should provide attenuation of ambient noise levels for indoor living areas and, where practical, for outdoor living areas.

DevStd NSE-O-1.1. Noise sensitive land uses should be located outside of the 65 dB(A) CNEL contours, unless this would prevent reasonable development of a property.

DevStd NSE-O-1.2. Noise sensitive uses proposed in areas exceeding 65 dB(A) CNEL shall be designed so that exterior living spaces do not exceed 65 dB(A) CNEL and interior noise levels attributable to exterior sources do not exceed 45 dB(A) CNEL when doors and windows are closed. Noise insulation construction techniques may include installation of air conditioning for all units and double-paned windows and wall insulation for all window and wall locations with lines of sight to the noise source. Building design and construction specifications shall meet the interior noise standard set forth in California Administrative Code, Title 25, as demonstrated through an acoustical analysis prior to project approval.

DevStd NSE-O-2.2. Noise attenuation barriers, muffling of grading equipment and additional mitigation where deemed appropriate should be required for development where construction equipment generates noise levels in excess of 95 dB(A).

DevStd NSE-O-1.3. Project design shall use a combination of vegetated berms, unit orientation or other methods to reduce noise affecting interior and exterior living spaces. The developer should retain a County-approved noise consultant to conduct a study determining the design and effectiveness of proposed noise reduction measures.

Soundwalls shall only be used if alternative noise reduction measures are ineffective. If found necessary soundwalls shall be decorative masonry or wood walls planted with fast-growing vines and shrubs.

DevStd NSE-O-1.5. All residential development proposed for the area within the 60dB or greater CNEL airport noise contour shall provide a Truth-in-Sales notice for future units indicating that the site is affected by low aircraft overflights and nuisance noise impacts. These sites include 5-9, 12, 18-23, 25-30, 32, 34, N, E, F and G (per Airport Land Use Commission).

Consistency

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, as described in Section 4.10, Noise, of the Richards Ranch Annexation EIR, the proposed project would generate a shortterm, intermittent increase in ambient noise during the construction phase of the project from initial site improvements, vehicle and equipment movement, and future construction of residential and commercial land uses. Longterm, permanent increases in ambient noise levels would be primarily associated with potential increases in vehicle traffic on nearby roadways as well as onsite activities. The implementation of Mitigation Measures NOI/mm-1.1 and NOI/mm-1.2 from the EIR, would reduce potentially significant impacts from Noise to less than significant and ensure consistency with related policies and development standards.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, as described in Section 4.10, Noise, of the Richards Ranch Annexation EIR, the project site is located on OCP Key Site 26, which is identified in this policy as being within the 60dB or greater CNEL airport noise contour. For consistency with this policy, the future project on the site would be conditioned to notify future residents that the site is affected by low aircraft overflights and nuisance noise impacts due to proximity of the site to the Santa Maria Airport.

Risk of Upset/Hazardous Materials

Policy RISK-O-2. The County shall minimize the risk to public safety associated with airport operations.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, according to Section 4.7, Hazards and Hazardous Materials, of the Richards Ranch Annexation EIR, the adopted Santa Maria Airport Land Use Compatibility Plan (ALUCP) identifies policies that have the dual objectives of: 1) protecting against constraints on airport expansion and operations that can result from encroachment of incompatible land uses, and 2) minimizing the public's exposure to excessive noise and safety hazards. To meet these objectives, the ALUCP addresses potential airport compatibility impacts related to four specific airport-related factors: 1) Noise; 2) Safety; 3) Airspace Protection; and 4) Overflight. A portion of the site located in the

Goals, Policies, Actions, and **Development Standards** Consistency northeast area is within safety zone 2, where future mini storage uses would be developed. The area identified as safety zone 4 would include residential development. The remaining areas of the site are in safety zone 6. The proposed development/uses are not precluded in the ALUCP provided that the recommendations in the ALUCP area are followed. Policy RISK-O-3. The County shall minimize the risk to public Consistent. The project applications for annexation and a safety associated with hazardous materials. General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, as discussed in Section 4.7, Hazards and Hazardous Resources, of the Richards Ranch Annexation EIR, impacts related to hazards and hazardous materials were found to be less than significant with the implementation of mitigation measures HAZ/mm-2.1, HAZ/mm-2.2, and HAZ/mm-5.1. Visual Policy VIS-O-1. Significant scenic and visual natural Consistent. The project applications for annexation and a resources in Orcutt shall be protected in order to preserve the General Plan Amendment and Rezone would not result in semi-rural character of the OPA. direct physical development of the site. Regarding future development of the site under the conceptual site plan, as Policy VIS-O-2. Prominent public view corridors (U.S. 101, discussed in Section 4.1. Aesthetics, of the Richards Ranch State Routes 1 & 135, Clark Ave., Santa Maria Way, and Annexation EIR, the project site is relatively flat with gently Union Valley Parkway) and public viewsheds (Orcutt/Solomon rolling slopes and does not provide an elevated vantage point. Hills, Casmalia Hills, and Orcutt Creek) shall be protected. Based on a review of City and County planning documents, DevStd VIS-O-2.1. Development shall be sited and designed there are no locally designated scenic vistas located on or to minimize the disruption of important public view corridors adjacent to the project site. and viewsheds through building orientation, minimization of grading on slopes, landscaping, and minimization of sound DevStd VIS-O-2.2. New homes on lots on the edge of bluff

DevStd VIS-O-1.1. All development including buildings, understories, fences, water tanks and retaining walls adjacent to designated natural open space areas shall be sited and designed to protect the visual character of these areas and blend in with natural landforms through the use of such methods as setbacks, building orientation, materials and colors (earth tones and non-reflective paints), landscape buffers, shielded exterior lighting, screening of parking areas and inclusion of perimeter roads to allow maintenance of open space corridors.

tops and canyon walls along significant open space/view corridors shall be of single story or partial second story design to minimize impacts to public view corridors (i.e., public roads,

trails, etc.)

Policy VIS-0-6. Outdoor lighting in Orcutt shall be designed and placed so as to minimize impacts on neighboring properties and the community in general.

DevStd VIS-O-6.1. Low pressure sodium (LPS) lighting or other alternative methods used for street lighting, parking lot lighting and security lighting should be investigated by the Public Works Department to reduce off-site impacts from night lighting.

DevStd VIS-O-6.3. Night lighting fixtures adjacent to residential areas shall be of the minimum height and intensity required for security/safety.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, as discussed in Section 4.1, Aesthetics, of the Richards Ranch Annexation EIR, future development would be required to be reviewed under a discretionary Planned Development permit to ensure that the project architecture, setbacks, orientation, lighting, etc. conforms with the visual character of the area.

Policy VIS-4. Public and private stormwater systems (recharge, retention, and retardation basins, culverts, channels, etc.) shall be designed and maintained to be visually attractive

Dev Std VIS-O-4.1. Basins shall be engineered so that perimeter fencing is minimized. Where required, perimeter fencing shall be unobtrusive (while minimizing interference with wildlife movement on rural parcels). Perimeter landscaping of basins shall consist of low maintenance trees, shrubs, turf, etc., and on public basins should be designed to accommodate recreational uses where appropriate. Landscaping and fencing within the basins should be maintained through a Landscape-Open Space Maintenance District.

Consistency

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site. Regarding future development of the site under the conceptual site plan, the proposed project would include on-site bio-retention facilities and LID features designed to comply with the requirements of SBCFCD and the Central Coast Regional Water Quality Control Board (RWQCB). As a result, these facilities would be designed and maintained in a manner that does not present unusual or unattractive features. The project would also include preparation of a landscaping plan for review and approval through the discretionary Planned Development Permit process and any public landscaping would be maintained by the City of Santa Maria's Recreation and Parks Department.

Key Site 26

Policy KS26-1. Key Site 26 is designated General Commercial, Office and Professional, and PD and zoned C-2. Any proposed development on Key Site 26 shall comply with the following development standards.

Potentially Consistent (pending approval of General Plan Amendment and Rezone). The current land use designations for the project site in the Santa Barbara County Comprehensive Plan are General Commercial/Office and Professional/Planned Development-3.3, which is intended for mixed-use development with a maximum of 3.3 dwelling units per acre. In contrast to the existing land use designations, the entire site is zoned in the County of Santa Barbara as Commercial (C-2) which is applied to provide retail business and commercial land uses for the residents of the surrounding community. The application includes the request for a General Plan Amendment and Rezone to change the land use designation and zoning on 27.40-acres of the site south of Union Valley Parkway to R-3, High Density Residential, and the remaining 16.35-acres located north and west of Union Valley Parkway and Orcutt Road to C-2, General Commercial. If the project were to be completed within the County of Santa Barbara, a General Plan Amendment to modify this policy of the OCP would also be required to allow for the future construction of residential development on the project site.

DevStd KS26-1. Any development application must be consistent with an approved Specific Plan. The currently approved Specific Plan (Figure KS26-2) may be used to satisfy this requirement.

Potentially Consistent (Pending approval of General Plan Amendment and Rezone). The current land use designations for the project site in the Santa Barbara County Comprehensive Plan are General Commercial/Office and Professional/Planned Development-3.3, which is intended for mixed-use development with a maximum of 3.3 dwelling units per acre. In contrast to the existing land use designations, the entire site is zoned in the County of Santa Barbara as Commercial (C-2) which is applied to provide retail business and commercial land uses for the residents of the surrounding community. The application includes the request for a General Plan Amendment and Rezone to change the land use designation and zoning on 27.40-acres of the site south of Union Valley Parkway to R-3, High Density Residential, and the remaining 16.35-acres located north and west of Union Valley Parkway and Orcutt Road to C-2, General Commercial. If the project were to be completed within the County of Santa Barbara, a General Plan Amendment would be required to modify this policy of the OCP and Figure KS26-2.

DevStd KS26-2. Any new Specific Plan shall include only commercial uses north of UVP (excluding the open space area), commercial uses fronting UVP and Hwy 135, office and professional uses on up to 5 acres south and east of the commercial uses and residential development to the south of the site (see Figure KS26-3).

Potentially Consistent (Pending approval of General Plan Amendment and Rezone). The current land use designations for the project site in the Santa Barbara County Comprehensive Plan are General Commercial/Office and Professional/Planned Development-3.3, which is intended for mixed-use development with a maximum of 3.3 dwelling units per acre. In contrast to the existing land use designations, the entire site is zoned Commercial (C-2) which is applied to

Consistency

provide retail business and commercial land uses for the residents of the surrounding community.

The application includes the request for a General Plan Amendment and Rezone to change the land use designation and zoning on 27.40-acres of the site south of Union Valley Parkway to R-3, High Density Residential, and the remaining 16.35-acres located north and west of Union Valley Parkway and Orcutt Road to C-2, General Commercial. Future development of the site as shown in the conceptual site plan would result in the construction of retail commercial development located north of Union Valley Parkway and fronting Highway 135 and Orcutt Road. The remaining area of the site located south of Union Valley Parkway would be developed with residential development. If the conceptual plan were to be developed within the County and not annexed into the City of Santa Maria, a General Plan Amendment to change the land use designation and zoning on the site as well as amendments to Figure KS26-2 in the OCP (identified as a Specific Plan in DevStd KS26-1) would be required for consistency with the County's Comprehensive Plan.

DevStd KS26-3. Development of the site shall include installation of the following landscaping features (consisting of drought-tolerant trees, shrubs and vines): An average 35-foot wide landscaped buffer along Highway 135 with trees which reach heights exceeding 50-feet at maturity in clusters a maximum of every 100 feet (some of this buffer may be developed in an easement secured from the County, with a minimum of 20 feet of this buffer located on the project site); An average 35 foot wide landscaped buffer along Union Valley Parkway with trees which reach a minimum height of 35-50 feet at maturity with a sufficiently large canopy to partially extend over the roadway; A minimum 15 wide foot landscaped planter strip along the site's north, east and south boundaries to soften views of new buildings and to break-up, and at a minimum, partially obscure building masses; Attractively landscaped pedestrian entries from adjacent roadways including attractive "stamped concrete" or other treated surface walkways linking existing sidewalks/paths with the center's own internal pedestrian circulation; Raised landscaped berms and/or decorative masonry walls incorporated into these buffer strips to supplement the screening provided by vegetation; Fast-growing vines and shrubs planted along all screening walls; and · Existing trees shall be preserved and incorporated in the project design, where feasible.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site.

Potentially Consistent (Conceptual Site Plan). Regarding future development of the site under the conceptual site plan, the future landscaping plan for the project would incorporate trees and landscaping throughout. The full details of build out of the project under the conceptual plan have not been finalized and would be reviewed through a discretionary permit process. The removal of trees on the site would be subject to mitigation measure BIO/mm-11.1, as identified in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR. which would require the applicant to retain a biologist or arborist to prepare a tree protection, replacement, and monitoring program. Locating trees that reach 50-feet in height at maturity within 35 feet of Highway 135 would require the review and approval of Caltrans. Depending on the results of Caltrans review, a General Plan Amendment to this Development Standard may be required to amend this standard. Additionally, as Union Valley Parkway and Orcutt Roads have been constructed and modified since the time that this standard was written, a review of the existing landscaping along these roadways would be needed to determine the ability to add additional trees and landscaping in these areas considering the existing infrastructure.

DevStd KS26-4. The developer shall fund and install a landscaped center median along Union Valley Parkway as deemed necessary by Planning and Development and Public Works. The entire length of the center median shall be landscaped with drought tolerant street trees, shrubs, groundcover and decorative flatwork acceptable to County Public Works and P&D or shall be consistent with the standard established by the landscape/median maintenance district. Trees shall be of sufficient size at maturity and spacing to provide a partial canopy over Union Valley Parkway. The owner/developer shall provide financial security for maintenance of the median plantings for 3 years or until such a time as the County adopts a landscape maintenance district or other method for median maintenance, whichever occurs first.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site.

Potentially Consistent (Conceptual Site Plan). Regarding future development of the site under the conceptual site plan, the City of Santa Maria would need to review and determine the ability to place a landscaped center median in this location. The conceptual site plan does propose to widen Union Valley Parkway along the project frontage and facilitate the future improvement of a new traffic signal at the intersection of Union Valley Parkway and Hummel Drive.

Consistency

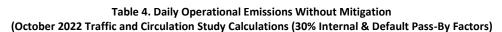
DevStd KS26-5. Where feasible, existing trees shall be retained for their screening and visual character.

Consistent. The project applications for annexation and a General Plan Amendment and Rezone would not result in direct physical development of the site.

Potentially Consistent (Conceptual Site Plan). Regarding future development of the site under the conceptual site plan, the future landscaping plan for the project would incorporate trees and landscaping throughout. The full details of build out of the project under the conceptual plan have not been finalized and would be reviewed through a discretionary permit process. The removal of trees on the site would be subject to mitigation measure BIO/mm-11.1, as identified in Section 4.3, Biological Resources, of the Richards Ranch Annexation EIR, requiring the applicant to retain a biologist or arborist to prepare a tree protection, replacement, and monitoring program.

APPENDIX E Supplemental CalEEMod Analyses





Category	ROG	NO _x	СО	SO ₂	FUG PM ₁₀	EXH PM ₁₀	TOT PM ₁₀	FUG PM _{2.5}	EXH PM _{2.5}	TOT PM _{2.5}		
Category	pounds per day											
Area ^{1,2}	16.73	0.47	40.83	0.00	0.00	0.23	0.23	0.00	0.23	0.23		
Energy ²	0.36	3.17	2.08	0.02	0.00	0.25	0.25	0.00	0.25	0.25		
Mobile External Trips ³	23.88	20.55	153.08	0.22	24.35	0.19	24.54	6.50	0.18	6.68		
Mobile Internal Trips ⁴	0.10	0.22	1.53	0.00	0.48	0.00	0.48	0.13	0.00	0.13		
Total Operational Emissions	41.07	24.41	197.52	0.24	24.83	0.67	25.50	6.63	0.65	7.28		
SBCAPCD Significance Thresholds (All Sources)	240	240	-	-	-	-	80	-	-	-		
Exceeds Significance Thresholds?	No	No	-	-	-	-	No	-	-	-		
Total Mobile-Only Emissions	23.98	20.77	154.61	0.22	24.83	0.19	25.02	6.63	0.18	6.81		
SBCAPCD Significance Thresholds (Mobile Sources)	25	25	-	-	-	-	-	-	-	-		
Exceeds Significance Thresholds?	No	No	-	-	-	-	-	-	-	-		

FUG = Fugitive; EXH = Exhaust; TOT = Total; N/A = Not applicable

- 1. Includes default VOC emissions for architectural coatings.
- 2. Based on corrected Square Footage derived from project site plan.
- 3. Includes reduction for existing transit stop near project site and site design elements for incorporation of pedestrian access.
- 4. Based on 623.43 miles per day traveled within the project site.



Table 5. Operational GHG Emissions without Mitigation (October 2022 Traffic and Circulation Study Calculations (30% Internal & Default Pass-By Factors)

Emission Source	•	ITCO₂e/Year) & Commercial
	2027	2030
Area ¹	6.2	6.2
Energy ¹	925.6	880.1
Mobile ²	3,866.3	3,639.8
Mobile Internal Trips ³	66.6	61.3
Waste	158.7	158.7
Water	50.0	46.3
Total Operational Emissions:	5,073.4	4,792.4
Amortized Construction Emissions:	126.2	126.2
Total with Amortized Construction Emissions:	5,199.6	4,918.6
Service Population (SP) ⁴ :	1,802	1,802
MTCO ₂ e/SP:	2.9	2.7
Locally-Appropriate GHG Efficiency Significance Threshold:		3.4
Exceeds Threshold?		No

GHG = Greenhouse gas; SP = Service population; $MTCO_2e$ = Metric tons of carbon dioxide equivalent

- 1. Based on corrected Square Footage derived from project site plan.
- 2. Includes reduction for existing transit stop near project site and site design elements for incorporation of pedestrian access.
- 3. Based on 623.43 miles per day traveled within the project site.
- 4. Service population was quantified based on employment and population estimates obtained from CalEEMod and ITE.





Catagony	ROG	NO _x	СО	SO ₂	FUG PM ₁₀	EXH PM ₁₀	TOT PM ₁₀	FUG PM _{2.5}	EXH PM _{2.5}	TOT PM _{2.5}
Category						pounds per o	day			
Area ^{1,2}	16.73	0.47	40.83	0.00	0.00	0.23	0.23	0.00	0.23	0.23
Energy ²	0.36	3.17	2.08	0.02	0.00	0.25	0.25	0.00	0.25	0.25
Mobile ³	24.05	20.97	156.23	0.22	25.30	0.19	25.52	6.74	0.18	6.93
Total Operational Emissions	41.14	24.60	199.14	0.24	25.29	0.67	26.00	6.74	0.66	7.41
SBCAPCD Significance Thresholds (All Sources)	240	240	-	-	-	-	80	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	-	-	No	-	-	-
Total Mobile Emissions	24.05	20.96	156.23	0.22	25.29	0.19	25.52	6.74	0.18	6.93
SBCAPCD Significance Thresholds (Mobile Sources)	25	25	-	-	-	-	-	-	-	-
Exceeds Significance Thresholds?	No	No	-	-	=	-	-	-	=	-

FUG = Fugitive; EXH = Exhaust; TOT = Total; N/A = Not applicable

- 1. Includes default VOC emissions for architectural coatings.
- 2. Based on corrected Square Footage derived from project site plan.
- 3. Based on previous CaLEEMod modeling conducted for the project and updated modeling to reflect total project VMT of 11,994,008. Includes transit and pedestrian adjustments.



Table 7. Operational GHG Emissions without Mitigation (Project Calculations in Support of Response to Comments (19% Internal & Current ITE Pass-By Factors)

Emission Source	Emissions (MTCO₂e/Year) Residential & Commercial						
	2027	2030					
Area ¹	6.2	6.2					
Energy ¹	925.6	880.1					
Mobile ²	4015.5	3778.8					
Waste	158.7	158.7					
Water	50.0	46.3					
Total Operational Emissions:	5156.0	4870.1					
Amortized Construction Emissions:	126.2	126.2					
Total with Amortized Construction Emissions:	5282.0	4996.0					
Service Population (SP) ³ :	1,802	1,802					
MTCO ₂ e/SP:	2.9	2.8					
Locally-Appropriate GHG Efficiency Significance Threshold:		3.4					
Exceeds Threshold?		No					

GHG = Greenhouse gas; SP = Service population; MTCO₂e = Metric tons of carbon dioxide equivalent

- 1. Based on corrected Square Footage derived from project site plan.
- 2. Based on previous CaLEEMod modeling conducted for the project and updated modeling to reflect total project VMT of 11,994,008. Includes transit and pedestrian adjustments.
- 3. Service population was quantified based on employment and population estimates obtained from CalEEMod and ITE.

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Richards Ranch Commercial

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.60	1000sqft	0.08	3,596.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.01	2,400.00	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37Climate Zone4Operational Year2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 152.51
 CH4 Intensity
 0.025
 N20 Intensity
 0.003

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use - Adjusted to match Figure,

Construction Phase - Building and Arch Coating are based on construction schedule

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Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,411.75	3,000.00
tblLandUse	LandUseSquareFeet	423.52	2,400.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.42
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00
tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01

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tblVehicleTrips	SU_TR	11.88	48.42
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.42
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

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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	ear tons/yr									MT/yr						
2024	0.2800	2.5038	2.7689	6.4100e- 003	0.3979	0.0969	0.4948	0.1493	0.0906	0.2399	0.0000	579.0267	579.0267	0.1018	0.0228	588.3494
2025	1.7335	0.7173	0.9523	2.1100e- 003	0.0589	0.0262	0.0851	0.0160	0.0246	0.0406	0.0000	191.4765	191.4765	0.0311	7.8600e- 003	194.5957
Maximum	1.7335	2.5038	2.7689	6.4100e- 003	0.3979	0.0969	0.4948	0.1493	0.0906	0.2399	0.0000	579.0267	579.0267	0.1018	0.0228	588.3494

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr										MT/yr						
2024	0.2800	2.5038	2.7689	6.4100e- 003	0.2537	0.0969	0.3506	0.0850	0.0906	0.1756	0.0000	579.0263	579.0263	0.1018	0.0228	588.3490	
2025	1.7335	0.7173	0.9523	2.1100e- 003	0.0589	0.0262	0.0851	0.0160	0.0246	0.0406	0.0000	191.4764	191.4764	0.0311	7.8600e- 003	194.5956	
Maximum	1.7335	2.5038	2.7689	6.4100e- 003	0.2537	0.0969	0.3506	0.0850	0.0906	0.1756	0.0000	579.0263	579.0263	0.1018	0.0228	588.3490	

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	31.56	0.00	24.86	38.88	0.00	22.91	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.9136	0.9136
2	4-1-2024	6-30-2024	0.6100	0.6100
3	7-1-2024	9-30-2024	0.6167	0.6167
4	10-1-2024	12-31-2024	0.6222	0.6222
5	1-1-2025	3-31-2025	0.5699	0.5699
6	4-1-2025	6-30-2025	1.8731	1.8731
		Highest	1.8731	1.8731

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003
Energy	0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246		0.0246	0.0246	0.0000	476.7130	476.7130	0.0272	8.9100e- 003	480.0472
Mobile	3.8360	3.2986	24.6701	0.0357	3.9369	0.0312	3.9680	1.0541	0.0291	1.0831	0.0000	3,420.678 6	3,420.678 6	0.3738	0.2377	3,500.860 8
Waste	1					0.0000	0.0000		0.0000	0.0000	94.4536	0.0000	94.4536	4.6837	0.0000	211.5449
Water	1					0.0000	0.0000		0.0000	0.0000	8.0389	9.3209	17.3599	0.0292	0.0177	23.3541
Total	4.5746	3.6219	24.9445	0.0376	3.9369	0.0558	3.9926	1.0541	0.0537	1.1077	102.4926	3,906.718 0	4,009.210 6	5.1138	0.2643	4,215.812 9

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Area	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003
Energy	0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246		0.0246	0.0246	0.0000	476.7130	476.7130	0.0272	8.9100e- 003	480.0472
Mobile	3.6620	2.8995	21.9739	0.0286	3.0904	0.0263	3.1167	0.8274	0.0245	0.8519	0.0000	2,746.182 1	2,746.182 1	0.3459	0.2112	2,817.761 0
Waste	n	,				0.0000	0.0000		0.0000	0.0000	47.2268	0.0000	47.2268	2.3418	0.0000	105.7724
Water	ii					0.0000	0.0000		0.0000	0.0000	6.7849	7.9444	14.7292	0.0247	0.0149	19.7891
Total	4.4006	3.2228	22.2482	0.0306	3.0904	0.0508	3.1412	0.8274	0.0491	0.8765	54.0117	3,230.845 0	3,284.856 7	2.7396	0.2350	3,423.375 6

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.80	11.02	10.81	18.70	21.50	8.83	21.32	21.50	8.59	20.88	47.30	17.30	18.07	46.43	11.08	18.80

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	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/23/2024	5	30	
3	Building Construction	Building Construction	2/24/2024	4/18/2025	5	300	

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4	Architectural Coating	Architectural Coating	5/17/2025	6/13/2025	5	20	
5	Paving	Paving	4/19/2025	5/16/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,869; Non-Residential Outdoor: 66,623; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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	Scrapers	2	8.00	367	0.48

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	168.00	68.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1359	0.0917	1.9000e- 004		6.1500e- 003	6.1500e- 003		5.6600e- 003	5.6600e- 003	0.0000	16.7285	16.7285	5.4100e- 003	0.0000	16.8638
Total	0.0133	0.1359	0.0917	1.9000e- 004	0.0983	6.1500e- 003	0.1044	0.0505	5.6600e- 003	0.0562	0.0000	16.7285	16.7285	5.4100e- 003	0.0000	16.8638

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3.2 Site Preparation - 2024

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					ton	s/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	2.2000e- 004	1.5000e- 004	1.6400e- 003	0.0000	5.6000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4184	0.4184	2.0000e- 005	1.0000e- 005	0.4228
Total	2.2000e- 004	1.5000e- 004	1.6400e- 003	0.0000	5.6000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4184	0.4184	2.0000e- 005	1.0000e- 005	0.4228

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0133	0.1359	0.0917	1.9000e- 004		6.1500e- 003	6.1500e- 003		5.6500e- 003	5.6500e- 003	0.0000	16.7285	16.7285	5.4100e- 003	0.0000	16.8638
Total	0.0133	0.1359	0.0917	1.9000e- 004	0.0383	6.1500e- 003	0.0445	0.0197	5.6500e- 003	0.0254	0.0000	16.7285	16.7285	5.4100e- 003	0.0000	16.8638

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3.2 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.2000e- 004	1.5000e- 004	1.6400e- 003	0.0000	5.6000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4184	0.4184	2.0000e- 005	1.0000e- 005	0.4228
Total	2.2000e- 004	1.5000e- 004	1.6400e- 003	0.0000	5.6000e- 004	0.0000	5.6000e- 004	1.5000e- 004	0.0000	1.5000e- 004	0.0000	0.4184	0.4184	2.0000e- 005	1.0000e- 005	0.4228

3.3 Grading - 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					ton	s/yr							MT	/yr		
Fugitive Dust			i i i		0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e- 004		0.0200	0.0200	 	0.0184	0.0184	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405
Total	0.0483	0.4857	0.4158	9.3000e- 004	0.1381	0.0200	0.1581	0.0548	0.0184	0.0732	0.0000	81.7793	81.7793	0.0265	0.0000	82.4405

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3.3 Grading - 2024

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					ton	s/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	7.2000e- 004	4.9000e- 004	5.4700e- 003	1.0000e- 005	1.8500e- 003	1.0000e- 005	1.8600e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.3946	1.3946	5.0000e- 005	5.0000e- 005	1.4094
Total	7.2000e- 004	4.9000e- 004	5.4700e- 003	1.0000e- 005	1.8500e- 003	1.0000e- 005	1.8600e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.3946	1.3946	5.0000e- 005	5.0000e- 005	1.4094

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0538	0.0000	0.0538	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0483	0.4857	0.4158	9.3000e- 004		0.0200	0.0200	 	0.0184	0.0184	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404
Total	0.0483	0.4857	0.4158	9.3000e- 004	0.0538	0.0200	0.0739	0.0214	0.0184	0.0398	0.0000	81.7792	81.7792	0.0265	0.0000	82.4404

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3.3 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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
1 Worker	7.2000e- 004	4.9000e- 004	5.4700e- 003	1.0000e- 005	1.8500e- 003	1.0000e- 005	1.8600e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.3946	1.3946	5.0000e- 005	5.0000e- 005	1.4094
Total	7.2000e- 004	4.9000e- 004	5.4700e- 003	1.0000e- 005	1.8500e- 003	1.0000e- 005	1.8600e- 003	4.9000e- 004	1.0000e- 005	5.0000e- 004	0.0000	1.3946	1.3946	5.0000e- 005	5.0000e- 005	1.4094

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.1633	1.4923	1.7945	2.9900e- 003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3525	257.3525	0.0609	0.0000	258.8739
Total	0.1633	1.4923	1.7945	2.9900e- 003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3525	257.3525	0.0609	0.0000	258.8739

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3.4 Building Construction - 2024 <u>Unmitigated Construction Off-Site</u>

	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					ton	s/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	9.1200e- 003	0.3588	0.1199	1.3500e- 003	0.0439	2.0700e- 003	0.0460	0.0127	1.9800e- 003	0.0147	0.0000	134.6678	134.6678	5.8900e- 003	0.0199	140.7339
Worker	0.0450	0.0306	0.3398	9.3000e- 004	0.1152	5.5000e- 004	0.1157	0.0306	5.0000e- 004	0.0311	0.0000	86.6856	86.6856	3.1100e- 003	2.8200e- 003	87.6052
Total	0.0541	0.3894	0.4598	2.2800e- 003	0.1591	2.6200e- 003	0.1617	0.0433	2.4800e- 003	0.0458	0.0000	221.3534	221.3534	9.0000e- 003	0.0227	228.3390

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.1633	1.4923	1.7945	2.9900e- 003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3522	257.3522	0.0609	0.0000	258.8736
Total	0.1633	1.4923	1.7945	2.9900e- 003		0.0681	0.0681		0.0640	0.0640	0.0000	257.3522	257.3522	0.0609	0.0000	258.8736

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3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	9.1200e- 003	0.3588	0.1199	1.3500e- 003	0.0439	2.0700e- 003	0.0460	0.0127	1.9800e- 003	0.0147	0.0000	134.6678	134.6678	5.8900e- 003	0.0199	140.7339
Worker	0.0450	0.0306	0.3398	9.3000e- 004	0.1152	5.5000e- 004	0.1157	0.0306	5.0000e- 004	0.0311	0.0000	86.6856	86.6856	3.1100e- 003	2.8200e- 003	87.6052
Total	0.0541	0.3894	0.4598	2.2800e- 003	0.1591	2.6200e- 003	0.1617	0.0433	2.4800e- 003	0.0458	0.0000	221.3534	221.3534	9.0000e- 003	0.0227	228.3390

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0533	0.4863	0.6273	1.0500e- 003		0.0206	0.0206		0.0194	0.0194	0.0000	90.4486	90.4486	0.0213	0.0000	90.9801
Total	0.0533	0.4863	0.6273	1.0500e- 003		0.0206	0.0206		0.0194	0.0194	0.0000	90.4486	90.4486	0.0213	0.0000	90.9801

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3.4 Building Construction - 2025 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	3.0700e- 003	0.1234	0.0412	4.7000e- 004	0.0154	7.1000e- 004	0.0162	4.4500e- 003	6.8000e- 004	5.1300e- 003	0.0000	46.4683	46.4683	2.1400e- 003	6.8600e- 003	48.5673
Worker	0.0149	9.6400e- 003	0.1116	3.1000e- 004	0.0405	1.8000e- 004	0.0407	0.0108	1.7000e- 004	0.0109	0.0000	29.7613	29.7613	1.0000e- 003	9.3000e- 004	30.0622
Total	0.0179	0.1330	0.1528	7.8000e- 004	0.0559	8.9000e- 004	0.0568	0.0152	8.5000e- 004	0.0161	0.0000	76.2297	76.2297	3.1400e- 003	7.7900e- 003	78.6295

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0533	0.4863	0.6273	1.0500e- 003		0.0206	0.0206	1 1 1	0.0194	0.0194	0.0000	90.4485	90.4485	0.0213	0.0000	90.9800
Total	0.0533	0.4863	0.6273	1.0500e- 003		0.0206	0.0206		0.0194	0.0194	0.0000	90.4485	90.4485	0.0213	0.0000	90.9800

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3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0700e- 003	0.1234	0.0412	4.7000e- 004	0.0154	7.1000e- 004	0.0162	4.4500e- 003	6.8000e- 004	5.1300e- 003	0.0000	46.4683	46.4683	2.1400e- 003	6.8600e- 003	48.5673
Worker	0.0149	9.6400e- 003	0.1116	3.1000e- 004	0.0405	1.8000e- 004	0.0407	0.0108	1.7000e- 004	0.0109	0.0000	29.7613	29.7613	1.0000e- 003	9.3000e- 004	30.0622
Total	0.0179	0.1330	0.1528	7.8000e- 004	0.0559	8.9000e- 004	0.0568	0.0152	8.5000e- 004	0.0161	0.0000	76.2297	76.2297	3.1400e- 003	7.7900e- 003	78.6295

3.5 Architectural Coating - 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					ton	s/yr							МТ	/yr		
Archit. Coating	1.6419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
- On Roda	1.7100e- 003	0.0115	0.0181	3.0000e- 005		5.2000e- 004	5.2000e- 004		5.2000e- 004	5.2000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5567
Total	1.6436	0.0115	0.0181	3.0000e- 005		5.2000e- 004	5.2000e- 004		5.2000e- 004	5.2000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5567

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3.5 Architectural Coating - 2025 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
I Weiker	7.7000e- 004	5.0000e- 004	5.7900e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.5444	1.5444	5.0000e- 005	5.0000e- 005	1.5600
Total	7.7000e- 004	5.0000e- 004	5.7900e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.5444	1.5444	5.0000e- 005	5.0000e- 005	1.5600

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6419					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e- 003	0.0115	0.0181	3.0000e- 005	 	5.2000e- 004	5.2000e- 004		5.2000e- 004	5.2000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5567
Total	1.6436	0.0115	0.0181	3.0000e- 005		5.2000e- 004	5.2000e- 004		5.2000e- 004	5.2000e- 004	0.0000	2.5533	2.5533	1.4000e- 004	0.0000	2.5567

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3.5 Architectural Coating - 2025 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	7.7000e- 004	5.0000e- 004	5.7900e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.5444	1.5444	5.0000e- 005	5.0000e- 005	1.5600
Total	7.7000e- 004	5.0000e- 004	5.7900e- 003	2.0000e- 005	2.1000e- 003	1.0000e- 005	2.1100e- 003	5.6000e- 004	1.0000e- 005	5.7000e- 004	0.0000	1.5444	1.5444	5.0000e- 005	5.0000e- 005	1.5600

3.6 Paving - 2025 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Off-Road	9.1500e- 003	0.0858	0.1458	2.3000e- 004	_	4.1900e- 003	4.1900e- 003		3.8500e- 003	3.8500e- 003	0.0000	20.0193	20.0193	6.4700e- 003	0.0000	20.1811
Paving	8.4600e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	0.0858	0.1458	2.3000e- 004		4.1900e- 003	4.1900e- 003		3.8500e- 003	3.8500e- 003	0.0000	20.0193	20.0193	6.4700e- 003	0.0000	20.1811

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3.6 Paving - 2025
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	3.4000e- 004	2.2000e- 004	2.5600e- 003	1.0000e- 005	9.3000e- 004	0.0000	9.3000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.6814	0.6814	2.0000e- 005	2.0000e- 005	0.6882
Total	3.4000e- 004	2.2000e- 004	2.5600e- 003	1.0000e- 005	9.3000e- 004	0.0000	9.3000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.6814	0.6814	2.0000e- 005	2.0000e- 005	0.6882

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	9.1500e- 003	0.0858	0.1458	2.3000e- 004		4.1900e- 003	4.1900e- 003		3.8500e- 003	3.8500e- 003	0.0000	20.0192	20.0192	6.4700e- 003	0.0000	20.1811
ı	8.4600e- 003				i I	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0176	0.0858	0.1458	2.3000e- 004		4.1900e- 003	4.1900e- 003		3.8500e- 003	3.8500e- 003	0.0000	20.0192	20.0192	6.4700e- 003	0.0000	20.1811

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3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	3.4000e- 004	2.2000e- 004	2.5600e- 003	1.0000e- 005	9.3000e- 004	0.0000	9.3000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.6814	0.6814	2.0000e- 005	2.0000e- 005	0.6882
Total	3.4000e- 004	2.2000e- 004	2.5600e- 003	1.0000e- 005	9.3000e- 004	0.0000	9.3000e- 004	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.6814	0.6814	2.0000e- 005	2.0000e- 005	0.6882

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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					ton	s/yr							MT	/yr		
Mitigated	3.6620	2.8995	21.9739	0.0286	3.0904	0.0263	3.1167	0.8274	0.0245	0.8519	0.0000	2,746.182 1	2,746.182 1	0.3459	0.2112	2,817.761 0
Unmitigated	3.8360	3.2986	24.6701	0.0357	3.9369	0.0312	3.9680	1.0541	0.0291	1.0831	0.0000	3,420.678 6	3,420.678 6	0.3738	0.2377	3,500.860 8

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.12	174.12	174.12	130,845	102,712
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.66	12,259.66	12,259.66	10,447,233	8,200,972

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas		5.50	6.40	0.80	80.20	19.00	14	21	65

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	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					ton	s/yr							MT	7/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.7863	124.7863	0.0205	2.4500e- 003	126.0292
Electricity Unmitigated				i i		0.0000	0.0000	i i	0.0000	0.0000	0.0000	124.7863	124.7863	0.0205	2.4500e- 003	126.0292
NaturalGas Mitigated	0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246	i i	0.0246	0.0246	0.0000	351.9267	351.9267	6.7500e- 003	6.4500e- 003	354.0181
NaturalGas Unmitigated	0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246		0.0246	0.0246	0.0000	351.9267	351.9267	6.7500e- 003	6.4500e- 003	354.0181

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	-/yr		
Automobile Care Center	94143.3	5.1000e- 004	4.6100e- 003	3.8800e- 003	3.0000e- 005		3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	5.0238	5.0238	1.0000e- 004	9.0000e- 005	5.0537
Convenience Market with Gas Pumps	7020	4.0000e- 005	3.4000e- 004	2.9000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.3746	0.3746	1.0000e- 005	1.0000e- 005	0.3768
Fast Food Restaurant w/o Drive Thru	1.24362e +006	6.7100e- 003	0.0610	0.0512	3.7000e- 004		4.6300e- 003	4.6300e- 003		4.6300e- 003	4.6300e- 003	0.0000	66.3643	66.3643	1.2700e- 003	1.2200e- 003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e +006	0.0210	0.1905	0.1600	1.1400e- 003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e- 003	3.8000e- 003	208.6208
Gasoline/Service Station	62832	3.4000e- 004	3.0800e- 003	2.5900e- 003	2.0000e- 005		2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	3.3530	3.3530	6.0000e- 005	6.0000e- 005	3.3729
High Turnover (Sit Down Restaurant)		5.5900e- 003	0.0508	0.0427	3.0000e- 004		3.8600e- 003	3.8600e- 003	 	3.8600e- 003	3.8600e- 003	0.0000	55.3036	55.3036	1.0600e- 003	1.0100e- 003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 - - - -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e- 004	6.3100e- 003	5.3000e- 003	4.0000e- 005	 	4.8000e- 004	4.8000e- 004		4.8000e- 004	4.8000e- 004	0.0000	6.8679	6.8679	1.3000e- 004	1.3000e- 004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e- 004	6.6600e- 003	5.6000e- 003	4.0000e- 005		5.1000e- 004	5.1000e- 004		5.1000e- 004	5.1000e- 004	0.0000	7.2511	7.2511	1.4000e- 004	1.3000e- 004	7.2942
Total		0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246		0.0246	0.0246	0.0000	351.9267	351.9267	6.7400e- 003	6.4500e- 003	354.0180

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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					
Automobile Care Center	94143.3	5.1000e- 004	4.6100e- 003	3.8800e- 003	3.0000e- 005	!	3.5000e- 004	3.5000e- 004		3.5000e- 004	3.5000e- 004	0.0000	5.0238	5.0238	1.0000e- 004	9.0000e- 005	5.0537
Convenience Market with Gas Pumps		4.0000e- 005	3.4000e- 004	2.9000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005	0.0000	0.3746	0.3746	1.0000e- 005	1.0000e- 005	0.3768
Fast Food Restaurant w/o Drive Thru	1.24362e +006	6.7100e- 003	0.0610	0.0512	3.7000e- 004		4.6300e- 003	4.6300e- 003	 	4.6300e- 003	4.6300e- 003	0.0000	66.3643	66.3643	1.2700e- 003	1.2200e- 003	66.7587
Fast Food Restaurant with Drive Thru	3.88631e +006	0.0210	0.1905	0.1600	1.1400e- 003		0.0145	0.0145		0.0145	0.0145	0.0000	207.3884	207.3884	3.9700e- 003	3.8000e- 003	208.6208
Gasoline/Service Station	62832	3.4000e- 004	3.0800e- 003	2.5900e- 003	2.0000e- 005	!	2.3000e- 004	2.3000e- 004		2.3000e- 004	2.3000e- 004	0.0000	3.3530	3.3530	6.0000e- 005	6.0000e- 005	3.3729
High Turnover (Sit Down Restaurant)		5.5900e- 003	0.0508	0.0427	3.0000e- 004		3.8600e- 003	3.8600e- 003	 	3.8600e- 003	3.8600e- 003	0.0000	55.3036	55.3036	1.0600e- 003	1.0100e- 003	55.6322
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	128700	6.9000e- 004	6.3100e- 003	5.3000e- 003	4.0000e- 005		4.8000e- 004	4.8000e- 004		4.8000e- 004	4.8000e- 004	0.0000	6.8679	6.8679	1.3000e- 004	1.3000e- 004	6.9087
Unrefrigerated Warehouse-No Rail	135880	7.3000e- 004	6.6600e- 003	5.6000e- 003	4.0000e- 005		5.1000e- 004	5.1000e- 004		5.1000e- 004	5.1000e- 004	0.0000	7.2511	7.2511	1.4000e- 004	1.3000e- 004	7.2942
Total		0.0356	0.3233	0.2716	1.9400e- 003		0.0246	0.0246		0.0246	0.0246	0.0000	351.9267	351.9267	6.7400e- 003	6.4500e- 003	354.0180

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Automobile Care Center	29127.6	2.0150	3.3000e- 004	4.0000e- 005	2.0350
Convenience Market with Gas Pumps	31170	2.1563	3.5000e- 004	4.0000e- 005	2.1777
Fast Food Restaurant w/o Drive Thru	193020	13.3526	2.1900e- 003	2.6000e- 004	13.4856
Fast Food Restaurant with Drive Thru	603188	41.7269	6.8400e- 003	8.2000e- 004	42.1425
Gasoline/Service Station	19440	1.3448	2.2000e- 004	3.0000e- 005	1.3582
High Turnover (Sit Down Restaurant)	160850	11.1272	1.8200e- 003	2.2000e- 004	11.2380
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	57365	3.9684	6.5000e- 004	8.0000e- 005	4.0079
Strip Mall	571450	39.5314	6.4800e- 003	7.8000e- 004	39.9251
Unrefrigerated Warehouse-No Rail	138250	9.5638	1.5700e- 003	1.9000e- 004	9.6590
Total		124.7863	0.0205	2.4600e- 003	126.0292

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
Automobile Care Center	29127.6	2.0150	3.3000e- 004	4.0000e- 005	2.0350			
Convenience Market with Gas Pumps	31170	2.1563	3.5000e- 004	4.0000e- 005	2.1777			
Fast Food Restaurant w/o Drive Thru	193020	13.3526	2.1900e- 003	2.6000e- 004	13.4856			
Fast Food Restaurant with Drive Thru	603188	41.7269	6.8400e- 003	8.2000e- 004	42.1425			
Gasoline/Service Station	19440	1.3448	2.2000e- 004	3.0000e- 005	1.3582			
High Turnover (Sit Down Restaurant)	160850	11.1272	1.8200e- 003	2.2000e- 004	11.2380			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	57365	3.9684	6.5000e- 004	8.0000e- 005	4.0079			
Strip Mall	571450	39.5314	6.4800e- 003	7.8000e- 004	39.9251			
Unrefrigerated Warehouse-No Rail	138250	9.5638	1.5700e- 003	1.9000e- 004	9.6590			
Total		124.7863	0.0205	2.4600e- 003	126.0292			

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Mitigated	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003
Unmitigated	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr									MT/yr					
Architectural Coating	0.1642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6000e- 004	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003
Total	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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															
Coating	0.1642					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.5386					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
" " " "	2.6000e- 004	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003
Total	0.7030	3.0000e- 005	2.8200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	5.4900e- 003	5.4900e- 003	1.0000e- 005	0.0000	5.8500e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
ga.ca	14.7292	0.0247	0.0149	19.7891
Unmitigated	17.3599	0.0292	0.0177	23.3541

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
Automobile Care Center	0.338692 / 0.207585	0.2969	4.4000e- 004	2.6000e- 004	0.3866		
Convenience Market with Gas Pumps	0.104572 / 0.0640924		1.4000e- 004	8.0000e- 005	0.1194		
Fast Food Restaurant w/o Drive Thru	1.8212 / 0.116247	1.3542	2.3300e- 003	1.4200e- 003	1.8343		
Fast Food Restaurant with Drive Thru	5.69126 / 0.363272	4.2319	7.2900e- 003	4.4200e- 003	5.7321		
Station	0.0398457 / 0.0244215	0.0349	5.0000e- 005	3.0000e- 005	0.0455		
High Turnover (Sit Down Restaurant)	1.51767 / 0.0968725	1.1285	1.9500e- 003	1.1800e- 003	1.5286		
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Strip Mall	4.07399 / 2.49696	3.5709	5.3100e- 003	3.1800e- 003	4.6503		
Unrefrigerated Warehouse-No Rail	9.13438 / 0	6.6509	0.0117	7.1000e- 003	9.0574		
Total		17.3599	0.0292	0.0177	23.3541		

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e		
Land Use	Mgal	MT/yr					
Automobile Care Center	0.285856 / 0.194923	0.2553	3.7000e- 004	2.2000e- 004	0.3311		
Market with Gas	0.0882586 / 0.0601828	0.0788	1.2000e- 004	7.0000e- 005	0.1022		
Fast Food Restaurant w/o Drive Thru	1.53709 / 0.109156	1.1456	1.9700e- 003	1.1900e- 003	1.5508		
Fast Food Restaurant with Drive Thru	4.80342 / 0.341112	3.5801	6.1600e- 003	3.7300e- 003	4.8464		
Gasoline/Service Station	0.0336297 / 0.0229318		4.0000e- 005	3.0000e- 005	0.0390		
High Turnover (Sit Down Restaurant)	1.28091 / 0.0909632	0.9547	1.6400e- 003	1.0000e- 003	1.2924		
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000		
Strip Mall	3.43845 / 2.34465	3.0713	4.4900e- 003	2.6800e- 003	3.9828		
Unrefrigerated Warehouse-No Rail	7.70941 / 0	5.6134	9.8600e- 003	5.9900e- 003	7.6445		
Total		14.7292	0.0247	0.0149	19.7891		

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated		2.3418	0.0000	105.7724
ega.ca	-	4.6837	0.0000	211.5449

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
Automobile Care Center	13.75	2.8554	0.1416	0.0000	6.3951		
Fast Food Restaurant w/o Drive Thru	69.11	14.3516	0.7117	0.0000	32.1429		
Fast Food Restaurant with Drive Thru	215.98	44.8511	2.2240	0.0000	100.4517		
Gasoline/Service Station	1.62	0.3364	0.0167	0.0000	0.7535		
High Turnover (Sit Down Restaurant)	59.5	12.3560	0.6127	0.0000	27.6733		
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		
Strip Mall	57.75	11.9926	0.5947	0.0000	26.8594		
Unrefrigerated Warehouse-No Rail	37.13	7.7105	0.3823	0.0000	17.2691		
Total		94.4536	4.6836	0.0000	211.5449		

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Automobile Care Center	6.875	1.4277	0.0708	0.0000	3.1975			
Fast Food Restaurant w/o Drive Thru	34.555	7.1758	0.3558	0.0000	16.0714			
Fast Food Restaurant with Drive Thru	107.99	22.4256	1.1120	0.0000	50.2259			
Gasoline/Service Station	0.81	0.1682	8.3400e- 003	0.0000	0.3767			
High Turnover (Sit Down Restaurant)		6.1780	0.3064	0.0000	13.8367			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Strip Mall	28.875	5.9963	0.2973	0.0000	13.4297			
Unrefrigerated Warehouse-No Rail	18.565	3.8553	0.1912	0.0000	8.6345			
Total		47.2268	2.3418	0.0000	105.7724			

9.0 Operational Offroad

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

10.0 Stationary Equipment

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Equipment Type	Number
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11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

Santa Barbara-North of Santa Ynez County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.60	1000sqft	0.08	3,596.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.01	2,400.00	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37Climate Zone4Operational Year2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 152.51
 CH4 Intensity
 0.025
 N20 Intensity
 0.003

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use - Adjusted to match Figure,

Construction Phase - Building and Arch Coating are based on construction schedule

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,411.75	3,000.00
tblLandUse	LandUseSquareFeet	423.52	2,400.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.42
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00
tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	11.88	48.42
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.42
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2024	3.2657	32.4064	28.0817	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2231	6,163.852 9
2025	164.4318	15.7477	19.9382	0.0471	1.4641	0.5504	2.0146	0.3975	0.5180	0.9155	0.0000	4,726.843 5	4,726.843 5	0.7161	0.2181	4,809.045 5
Maximum	164.4318	32.4064	28.0817	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2231	6,163.852 9

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2024	3.2657	32.4064	28.0817	0.0631	7.7799	1.3360	9.0098	3.9701	1.2291	5.1016	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2231	6,163.852 9
2025	164.4318	15.7477	19.9382	0.0471	1.4641	0.5504	2.0146	0.3975	0.5180	0.9155	0.0000	4,726.843 5	4,726.843 5	0.7161	0.2181	4,809.045 5
Maximum	164.4318	32.4064	28.0817	0.0631	7.7799	1.3360	9.0098	3.9701	1.2291	5.1016	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2231	6,163.852 9

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.47	0.00	52.10	58.52	0.00	50.60	0.00	0.00	0.00	0.00	0.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Energy	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
Mobile	22.0098	16.9541	124.7370	0.1988	22.1120	0.1714	22.2834	5.9096	0.1599	6.0694		21,013.64 60	21,013.64 60	2.0997	1.3755	21,476.04 95
Total	26.0583	18.7257	126.2563	0.2094	22.1120	0.3061	22.4181	5.9096	0.2946	6.2042		23,139.37 25	23,139.37 25	2.1406	1.4145	23,614.41 21

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Energy	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
Mobile	21.0836	14.9121	110.1749	0.1595	17.3577	0.1443	17.5020	4.6389	0.1345	4.7735		16,861.07 83	16,861.07 83	1.9333	1.2213	17,273.35 88
Total	25.1321	16.6838	111.6942	0.1701	17.3577	0.2791	17.6367	4.6389	0.2693	4.9082		18,986.80 48	18,986.80 48	1.9742	1.2603	19,411.72 14

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.55	10.90	11.53	18.76	21.50	8.84	21.33	21.50	8.61	20.89	0.00	17.95	17.95	7.77	10.90	17.80

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	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/23/2024	5	30	
3	Building Construction	Building Construction	2/24/2024	4/18/2025	5	300	
4	Architectural Coating	Architectural Coating	5/17/2025	6/13/2025	5	20	
5	Paving	Paving	4/19/2025	5/16/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,869; Non-Residential Outdoor: 66,623; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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	Scrapers	2	8.00	367	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	168.00	68.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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					lb/d	day							lb/d	day		
Fugitive Dust	 				19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	19.6570	1.2294	20.8864	10.1025	1.1310	11.2335		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611
Total	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611

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3.2 Site Preparation - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust		1 1 1			7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	7.6662	1.2294	8.8956	3.9400	1.1310	5.0710	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611
Total	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.748 7	6,009.748 7	1.9437	 	6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	9.2036	1.3354	10.5390	3.6538	1.2286	4.8823		6,009.748 7	6,009.748 7	1.9437		6,058.340 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124
Total	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250		i i	0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	3.5894	1.3354	4.9248	1.4250	1.2286	2.6535	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124
Total	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/c	lay							
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0829	3.1227	1.0655	0.0122	0.4031	0.0186	0.4218	0.1160	0.0178	0.1338		1,336.640 0	1,336.640 0	0.0585	0.1970	1,396.801 3
Worker	0.3993	0.2475	3.0142	8.5100e- 003	1.0610	4.9300e- 003	1.0659	0.2815	4.5400e- 003	0.2860		877.7938	877.7938	0.0290	0.0261	886.3039
Total	0.4822	3.3702	4.0797	0.0207	1.4641	0.0235	1.4877	0.3975	0.0223	0.4198		2,214.433 8	2,214.433 8	0.0875	0.2231	2,283.105 1

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/c	lay							
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133	1 1 1	0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0829	3.1227	1.0655	0.0122	0.4031	0.0186	0.4218	0.1160	0.0178	0.1338		1,336.640 0	1,336.640 0	0.0585	0.1970	1,396.801 3
Worker	0.3993	0.2475	3.0142	8.5100e- 003	1.0610	4.9300e- 003	1.0659	0.2815	4.5400e- 003	0.2860		877.7938	877.7938	0.0290	0.0261	886.3039
Total	0.4822	3.3702	4.0797	0.0207	1.4641	0.0235	1.4877	0.3975	0.0223	0.4198		2,214.433 8	2,214.433 8	0.0875	0.2231	2,283.105 1

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/d	lay							
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0795	3.0558	1.0404	0.0119	0.4031	0.0182	0.4213	0.1160	0.0174	0.1334		1,312.671 8	1,312.671 8	0.0606	0.1938	1,371.924 0
Worker	0.3751	0.2221	2.8131	8.2300e- 003	1.0610	4.7000e- 003	1.0657	0.2815	4.3300e- 003	0.2858		857.6974	857.6974	0.0264	0.0244	865.6235
Total	0.4546	3.2780	3.8535	0.0202	1.4641	0.0229	1.4870	0.3975	0.0217	0.4192		2,170.369 2	2,170.369	0.0870	0.2181	2,237.547 4

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d			lb/d	lay							
	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276	1 1 1	0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0795	3.0558	1.0404	0.0119	0.4031	0.0182	0.4213	0.1160	0.0174	0.1334		1,312.671 8	1,312.671 8	0.0606	0.1938	1,371.924 0
Worker	0.3751	0.2221	2.8131	8.2300e- 003	1.0610	4.7000e- 003	1.0657	0.2815	4.3300e- 003	0.2858		857.6974	857.6974	0.0264	0.0244	865.6235
Total	0.4546	3.2780	3.8535	0.0202	1.4641	0.0229	1.4870	0.3975	0.0217	0.4192		2,170.369 2	2,170.369	0.0870	0.2181	2,237.547 4

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	164.1850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	164.3559	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0759	0.0450	0.5693	1.6700e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		173.5816	173.5816	5.3400e- 003	4.9300e- 003	175.1857
Total	0.0759	0.0450	0.5693	1.6700e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		173.5816	173.5816	5.3400e- 003	4.9300e- 003	175.1857

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	164.1850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003	 	0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	164.3559	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	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
Worker	0.0759	0.0450	0.5693	1.6700e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		173.5816	173.5816	5.3400e- 003	4.9300e- 003	175.1857
Total	0.0759	0.0450	0.5693	1.6700e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		173.5816	173.5816	5.3400e- 003	4.9300e- 003	175.1857

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7614	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0335	0.0198	0.2512	7.4000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		76.5801	76.5801	2.3600e- 003	2.1800e- 003	77.2878
Total	0.0335	0.0198	0.2512	7.4000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		76.5801	76.5801	2.3600e- 003	2.1800e- 003	77.2878

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.8463]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7614	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0335	0.0198	0.2512	7.4000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		76.5801	76.5801	2.3600e- 003	2.1800e- 003	77.2878
Total	0.0335	0.0198	0.2512	7.4000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		76.5801	76.5801	2.3600e- 003	2.1800e- 003	77.2878

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/c	lay		
Mitigated	21.0836	14.9121	110.1749	0.1595	17.3577	0.1443	17.5020	4.6389	0.1345	4.7735		16,861.07 83	16,861.07 83	1.9333	1.2213	17,273.35 88
Unmitigated	22.0098	16.9541	124.7370	0.1988	22.1120	0.1714	22.2834	5.9096	0.1599	6.0694		21,013.64 60	21,013.64 60	2.0997	1.3755	21,476.04 95

4.2 Trip Summary Information

	Ave	rage Daily Trip R	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	174.12	174.12	174.12	130,845	102,712
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320
Total	12,259.66	12,259.66	12,259.66	10,447,233	8,200,972

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	6.60	5.50	6.40	33.00	48.00	19.00	21	51	28
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/	day							lb/d	day		
Automobile Care Center	257.927	2.7800e- 003	0.0253	0.0212	1.5000e- 004		1.9200e- 003	1.9200e- 003		1.9200e- 003	1.9200e- 003		30.3443	30.3443	5.8000e- 004	5.6000e- 004	30.5247
Convenience Market with Gas Pumps	19.2329	2.1000e- 004	1.8900e- 003	1.5800e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.2627	2.2627	4.0000e- 005	4.0000e- 005	2.2761
Fast Food Restaurant w/o Drive Thru	3407.18	0.0367	0.3340	0.2806	2.0000e- 003	 	0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e- 003	7.3500e- 003	403.2265
Fast Food Restaurant with Drive Thru	10647.4	0.1148	1.0439	0.8769	6.2600e- 003		0.0793	0.0793		0.0793	0.0793		1,252.639 0	1,252.639 0	0.0240	0.0230	1,260.082 8
Gasoline/Service Station	172.142	1.8600e- 003	0.0169	0.0142	1.0000e- 004		1.2800e- 003	1.2800e- 003		1.2800e- 003	1.2800e- 003		20.2521	20.2521	3.9000e- 004	3.7000e- 004	20.3724
High Turnover (Sit Down Restaurant)		0.0306	0.2784	0.2338	1.6700e- 003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e- 003	6.1200e- 003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	352.603	3.8000e- 003	0.0346	0.0290	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003		41.4827	41.4827	8.0000e- 004	7.6000e- 004	41.7292
Unrefrigerated Warehouse-No Rail	372.274	4.0100e- 003	0.0365	0.0307	2.2000e- 004		2.7700e- 003	2.7700e- 003		2.7700e- 003	2.7700e- 003		43.7969	43.7969	8.4000e- 004	8.0000e- 004	44.0572
Total		0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659	2,125.659 2	0.0407	0.0390	2,138.291 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	day		
Automobile Care Center	0.257927	2.7800e- 003	0.0253	0.0212	1.5000e- 004		1.9200e- 003	1.9200e- 003		1.9200e- 003	1.9200e- 003		30.3443	30.3443	5.8000e- 004	5.6000e- 004	30.5247
Convenience Market with Gas Pumps	0.0192329	2.1000e- 004	1.8900e- 003	1.5800e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.2627	2.2627	4.0000e- 005	4.0000e- 005	2.2761
Fast Food Restaurant w/o Drive Thru	3.40718	0.0367	0.3340	0.2806	2.0000e- 003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e- 003	7.3500e- 003	403.2265
Fast Food Restaurant with Drive Thru	10.6474	0.1148	1.0439	0.8769	6.2600e- 003		0.0793	0.0793		0.0793	0.0793		1,252.639 0	1,252.639 0	0.0240	0.0230	1,260.082 8
Gasoline/Service Station	0.172142	1.8600e- 003	0.0169	0.0142	1.0000e- 004		1.2800e- 003	1.2800e- 003		1.2800e- 003	1.2800e- 003		20.2521	20.2521	3.9000e- 004	3.7000e- 004	20.3724
High Turnover (Sit Down Restaurant)		0.0306	0.2784	0.2338	1.6700e- 003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e- 003	6.1200e- 003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.352603	3.8000e- 003	0.0346	0.0290	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003		41.4827	41.4827	8.0000e- 004	7.6000e- 004	41.7292
Unrefrigerated Warehouse-No Rail	0.372274	4.0100e- 003	0.0365	0.0307	2.2000e- 004		2.7700e- 003	2.7700e- 003		2.7700e- 003	2.7700e- 003		43.7969	43.7969	8.4000e- 004	8.0000e- 004	44.0572
Total		0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0

6.0 Area Detail

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Unmitigated	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.8996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	2.9512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
,	2.8800e- 003	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Total	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
	0.8996					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	2.9512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
'	2.8800e- 003	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Total	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Commercial

Santa Barbara-North of Santa Ynez County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	39.50	1000sqft	2.00	39,500.00	0
Other Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	163.90	1000sqft	3.76	163,900.00	0
Fast Food Restaurant w/o Drive Thru	6.00	1000sqft	1.86	6,000.00	0
Fast Food Restaurant with Drive Thru	18.75	1000sqft	2.33	18,750.00	0
High Turnover (Sit Down Restaurant)	5.00	1000sqft	0.11	5,000.00	0
Automobile Care Center	3.60	1000sqft	0.08	3,596.00	0
Convenience Market with Gas Pumps	10.00	Pump	0.03	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.01	2,400.00	0
Strip Mall	55.00	1000sqft	3.47	55,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37Climate Zone4Operational Year2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 152.51
 CH4 Intensity
 0.025
 N20 Intensity
 0.003

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity Factors have been adjusted to reflect PG&E's renewable portfolio for 2027.

Land Use - Adjusted to match Figure,

Construction Phase - Building and Arch Coating are based on construction schedule

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating - Low VOC Paints

Vehicle Trips - Trip rate is based on traffic study with a 30% internal trip reduction applied, trip length is default.

Area Coating - Low VOC

Construction Off-road Equipment Mitigation - Tier 4 water exposed area

Mobile Land Use Mitigation - Project will improve pedestrian network and is located 0.14 miles away from bus stop.

Area Mitigation - Low VOC paints

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	1,411.75	3,000.00
tblLandUse	LandUseSquareFeet	423.52	2,400.00
tblLandUse	LotAcreage	0.91	2.00
tblLandUse	LotAcreage	0.14	1.86
tblLandUse	LotAcreage	0.43	2.33
tblLandUse	LotAcreage	1.26	3.47
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	23.72	48.42
tblVehicleTrips	ST_TR	322.50	140.56
tblVehicleTrips	ST_TR	696.00	67.90
tblVehicleTrips	ST_TR	616.12	327.24
tblVehicleTrips	ST_TR	182.17	28.00
tblVehicleTrips	ST_TR	122.40	75.04
tblVehicleTrips	ST_TR	42.04	66.14
tblVehicleTrips	ST_TR	1.74	1.01

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	SU_TR	11.88	48.42
tblVehicleTrips	SU_TR	322.50	140.56
tblVehicleTrips	SU_TR	500.00	67.90
tblVehicleTrips	SU_TR	472.58	327.24
tblVehicleTrips	SU_TR	166.88	28.00
tblVehicleTrips	SU_TR	142.64	75.04
tblVehicleTrips	SU_TR	20.43	66.14
tblVehicleTrips	SU_TR	1.74	1.01
tblVehicleTrips	WD_TR	23.72	48.42
tblVehicleTrips	WD_TR	322.50	140.56
tblVehicleTrips	WD_TR	346.23	67.90
tblVehicleTrips	WD_TR	470.95	327.24
tblVehicleTrips	WD_TR	172.01	28.00
tblVehicleTrips	WD_TR	112.18	75.04
tblVehicleTrips	WD_TR	44.32	66.14
tblVehicleTrips	WD_TR	1.74	1.01

2.0 Emissions Summary

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/c	lay		
2024	3.2700	32.4106	28.0973	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2260	6,161.826 3
2025	164.4388	15.8756	20.0973	0.0470	1.4641	0.5505	2.0146	0.3975	0.5180	0.9155	0.0000	4,711.203 6	4,711.203 6	0.7163	0.2209	4,794.286 3
Maximum	164.4388	32.4106	28.0973	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2260	6,161.826 3

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/c	lay		
2024	3.2700	32.4106	28.0973	0.0631	7.7799	1.3360	9.0098	3.9701	1.2291	5.1016	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2260	6,161.826 3
2025	164.4388	15.8756	20.0973	0.0470	1.4641	0.5505	2.0146	0.3975	0.5180	0.9155	0.0000	4,711.203 6	4,711.203 6	0.7163	0.2209	4,794.286 3
Maximum	164.4388	32.4106	28.0973	0.0631	7.7799	1.3360	9.0098	3.9701	1.2291	5.1016	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2260	6,161.826 3

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	56.47	0.00	52.10	58.52	0.00	50.60	0.00	0.00	0.00	0.00	0.00	0.00

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Energy	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
Mobile	21.1190	18.4304	143.1781	0.1962	22.1120	0.1716	22.2836	5.9096	0.1602	6.0697		20,739.69 73	20,739.69 73	2.3662	1.4696	21,236.80 51
Total	25.1675	20.2021	144.6974	0.2068	22.1120	0.3064	22.4184	5.9096	0.2949	6.2045		22,865.42 39	22,865.42 39	2.4072	1.5086	23,375.16 78

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Energy	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
Mobile	20.1453	16.2415	128.0105	0.1575	17.3577	0.1446	17.5023	4.6389	0.1348	4.7737		16,652.94 55	16,652.94 55	2.1954	1.3084	17,097.73 84
Total	24.1939	18.0131	129.5297	0.1681	17.3577	0.2793	17.6370	4.6389	0.2695	4.9085		18,778.67 20	18,778.67 20	2.2363	1.3474	19,236.10 10

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	3.87	10.84	10.48	18.70	21.50	8.83	21.33	21.50	8.60	20.89	0.00	17.87	17.87	7.10	10.69	17.71

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	1/1/2024	1/12/2024	5	10	
2	Grading	Grading	1/13/2024	2/23/2024	5	30	
3	Building Construction	Building Construction	2/24/2024	4/18/2025	5	300	
4	Architectural Coating	Architectural Coating	5/17/2025	6/13/2025	5	20	
5	Paving	Paving	4/19/2025	5/16/2025	5	20	

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 6.46

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 199,869; Non-Residential Outdoor: 66,623; Striped Parking Area: 16,891 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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	Scrapers	2	8.00	367	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	168.00	68.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	34.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 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	lb/day												lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	19.6570	1.2294	20.8864	10.1025	1.1310	11.2335		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372
Total	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	7.6662	1.2294	8.8956	3.9400	1.1310	5.0710	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372
Total	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.748 7	6,009.748 7	1.9437	 	6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	9.2036	1.3354	10.5390	3.6538	1.2286	4.8823		6,009.748 7	6,009.748 7	1.9437		6,058.340 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858
Total	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286	0.0000	6,009.748 7	6,009.748 7	1.9437	 	6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	3.5894	1.3354	4.9248	1.4250	1.2286	2.6535	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	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
Worker	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858
Total	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0816	3.2202	1.0956	0.0122	0.4031	0.0187	0.4218	0.1160	0.0179	0.1339		1,338.348 8	1,338.348 8	0.0583	0.1974	1,398.636 0
Worker	0.4353	0.2829	3.1457	8.3400e- 003	1.0610	4.9300e- 003	1.0659	0.2815	4.5400e- 003	0.2860		859.9549	859.9549	0.0321	0.0286	869.2803
Total	0.5168	3.5032	4.2413	0.0205	1.4641	0.0236	1.4878	0.3975	0.0224	0.4199		2,198.303 7	2,198.303 7	0.0904	0.2260	2,267.916 3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0816	3.2202	1.0956	0.0122	0.4031	0.0187	0.4218	0.1160	0.0179	0.1339		1,338.348 8	1,338.348 8	0.0583	0.1974	1,398.636 0
Worker	0.4353	0.2829	3.1457	8.3400e- 003	1.0610	4.9300e- 003	1.0659	0.2815	4.5400e- 003	0.2860		859.9549	859.9549	0.0321	0.0286	869.2803
Total	0.5168	3.5032	4.2413	0.0205	1.4641	0.0236	1.4878	0.3975	0.0224	0.4199		2,198.303 7	2,198.303 7	0.0904	0.2260	2,267.916 3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
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	0.0780	3.1520	1.0702	0.0119	0.4031	0.0182	0.4214	0.1160	0.0175	0.1335		1,314.419 8	1,314.419 8	0.0603	0.1942	1,373.793 8
Worker	0.4098	0.2539	2.9425	8.0700e- 003	1.0610	4.7000e- 003	1.0657	0.2815	4.3300e- 003	0.2858		840.3094	840.3094	0.0293	0.0267	848.9945
Total	0.4878	3.4060	4.0127	0.0200	1.4641	0.0229	1.4871	0.3975	0.0218	0.4193		2,154.729 3	2,154.729 3	0.0896	0.2209	2,222.788 3

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0780	3.1520	1.0702	0.0119	0.4031	0.0182	0.4214	0.1160	0.0175	0.1335		1,314.419 8	1,314.419 8	0.0603	0.1942	1,373.793 8
Worker	0.4098	0.2539	2.9425	8.0700e- 003	1.0610	4.7000e- 003	1.0657	0.2815	4.3300e- 003	0.2858		840.3094	840.3094	0.0293	0.0267	848.9945
Total	0.4878	3.4060	4.0127	0.0200	1.4641	0.0229	1.4871	0.3975	0.0218	0.4193		2,154.729 3	2,154.729 3	0.0896	0.2209	2,222.788 3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	164.1850					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	164.3559	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0829	0.0514	0.5955	1.6300e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		170.0626	170.0626	5.9200e- 003	5.4000e- 003	171.8203
Total	0.0829	0.0514	0.5955	1.6300e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		170.0626	170.0626	5.9200e- 003	5.4000e- 003	171.8203

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	164.1850		i i i			0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	164.3559	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0829	0.0514	0.5955	1.6300e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		170.0626	170.0626	5.9200e- 003	5.4000e- 003	171.8203
Total	0.0829	0.0514	0.5955	1.6300e- 003	0.2147	9.5000e- 004	0.2157	0.0570	8.8000e- 004	0.0578		170.0626	170.0626	5.9200e- 003	5.4000e- 003	171.8203

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7614	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0366	0.0227	0.2627	7.2000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		75.0276	75.0276	2.6100e- 003	2.3800e- 003	75.8031
Total	0.0366	0.0227	0.2627	7.2000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		75.0276	75.0276	2.6100e- 003	2.3800e- 003	75.8031

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.8463					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7614	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0366	0.0227	0.2627	7.2000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		75.0276	75.0276	2.6100e- 003	2.3800e- 003	75.8031
Total	0.0366	0.0227	0.2627	7.2000e- 004	0.0947	4.2000e- 004	0.0952	0.0251	3.9000e- 004	0.0255		75.0276	75.0276	2.6100e- 003	2.3800e- 003	75.8031

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	20.1453	16.2415	128.0105	0.1575	17.3577	0.1446	17.5023	4.6389	0.1348	4.7737		16,652.94 55	16,652.94 55	2.1954	1.3084	17,097.73 84
Unmitigated	21.1190	18.4304	143.1781	0.1962	22.1120	0.1716	22.2836	5.9096	0.1602	6.0697		20,739.69 73	20,739.69 73	2.3662	1.4696	21,236.80 51

4.2 Trip Summary Information

	Ave	rage Daily Trip R	ate	Unmitigated	Mitigated		
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Automobile Care Center	174.12	174.12	174.12	130,845	102,712		
Convenience Market with Gas Pumps	1,405.60	1,405.60	1405.60	592,662	465,234		
Fast Food Restaurant w/o Drive Thru	407.40	407.40	407.40	509,940	400,298		
Fast Food Restaurant with Drive Thru	6,135.75	6,135.75	6135.75	4,468,179	3,507,475		
Gasoline/Service Station	84.00	84.00	84.00	37,923	29,769		
High Turnover (Sit Down Restaurant)	375.20	375.20	375.20	336,528	264,171		
Other Asphalt Surfaces	0.00	0.00	0.00				
Parking Lot	0.00	0.00	0.00				
Strip Mall	3,637.70	3,637.70	3637.70	4,282,849	3,361,993		
Unrefrigerated Warehouse-No Rail	39.90	39.90	39.90	88,307	69,320		
Total	12,259.66	12,259.66	12,259.66	10,447,233	8,200,972		

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4.3 Trip Type Information

		Miles			Trip %		Trip Purpose %				
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Automobile Care Center	r 6.60 5.50 6.40 33.00 48.00		48.00	19.00	21	51	28				
Convenience Market with Gas	6.60	5.50	6.40	0.80	80.20	19.00	14	21	65		
Fast Food Restaurant w/o Drive	6.60	5.50	6.40	1.50	79.50	19.00	51	37	12		
Fast Food Restaurant with Drive	6.60	5.50	6.40	2.20	78.80	19.00	29	21	50		
Gasoline/Service Station	6.60	5.50	6.40	2.00	79.00	19.00	14	27	59		
High Turnover (Sit Down	6.60	5.50	6.40	8.50	72.50	19.00	37	20	43		
Other Asphalt Surfaces	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0		
Parking Lot	6.60	5.50	6.40	0.00	0.00	0.00	0	0	0		
Strip Mall	6.60	5.50	6.40	16.60	64.40	19.00	45	40	15		
Unrefrigerated Warehouse-No	6.60	5.50	6.40	59.00	0.00	41.00	92	5	3		

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Convenience Market with Gas Pumps	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant w/o Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Fast Food Restaurant with Drive Thru	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Gasoline/Service Station	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
High Turnover (Sit Down Restaurant)	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Other Asphalt Surfaces	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Parking Lot	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Strip Mall	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474
Unrefrigerated Warehouse-No Rail	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day								lb/day							
NaturalGas Mitigated	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346	 	0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0
Unmitigated	0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Automobile Care Center	257.927	2.7800e- 003	0.0253	0.0212	1.5000e- 004		1.9200e- 003	1.9200e- 003		1.9200e- 003	1.9200e- 003		30.3443	30.3443	5.8000e- 004	5.6000e- 004	30.5247
Convenience Market with Gas Pumps	19.2329	2.1000e- 004	1.8900e- 003	1.5800e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.2627	2.2627	4.0000e- 005	4.0000e- 005	2.2761
Fast Food Restaurant w/o Drive Thru	3407.18	0.0367	0.3340	0.2806	2.0000e- 003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e- 003	7.3500e- 003	403.2265
Fast Food Restaurant with Drive Thru	10647.4	0.1148	1.0439	0.8769	6.2600e- 003		0.0793	0.0793		0.0793	0.0793		1,252.639 0	1,252.639 0	0.0240	0.0230	1,260.082 8
Gasoline/Service Station	172.142	1.8600e- 003	0.0169	0.0142	1.0000e- 004		1.2800e- 003	1.2800e- 003		1.2800e- 003	1.2800e- 003		20.2521	20.2521	3.9000e- 004	3.7000e- 004	20.3724
High Turnover (Sit Down Restaurant)		0.0306	0.2784	0.2338	1.6700e- 003		0.0212	0.0212		0.0212	0.0212		334.0371	334.0371	6.4000e- 003	6.1200e- 003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	352.603	3.8000e- 003	0.0346	0.0290	2.1000e- 004		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003		41.4827	41.4827	8.0000e- 004	7.6000e- 004	41.7292
Unrefrigerated Warehouse-No Rail	372.274	4.0100e- 003	0.0365	0.0307	2.2000e- 004		2.7700e- 003	2.7700e- 003		2.7700e- 003	2.7700e- 003		43.7969	43.7969	8.4000e- 004	8.0000e- 004	44.0572
Total		0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day					lb/day					
Automobile Care Center	0.257927	2.7800e- 003	0.0253	0.0212	1.5000e- 004		1.9200e- 003	1.9200e- 003		1.9200e- 003	1.9200e- 003		30.3443	30.3443	5.8000e- 004	5.6000e- 004	30.5247
Convenience Market with Gas Pumps	0.0192329	2.1000e- 004	1.8900e- 003	1.5800e- 003	1.0000e- 005		1.4000e- 004	1.4000e- 004		1.4000e- 004	1.4000e- 004		2.2627	2.2627	4.0000e- 005	4.0000e- 005	2.2761
Fast Food Restaurant w/o Drive Thru	3.40718	0.0367	0.3340	0.2806	2.0000e- 003		0.0254	0.0254		0.0254	0.0254		400.8445	400.8445	7.6800e- 003	7.3500e- 003	403.2265
Fast Food Restaurant with Drive Thru	10.6474	0.1148	1.0439	0.8769	6.2600e- 003		0.0793	0.0793		0.0793	0.0793		1,252.639 0	1,252.639 0	0.0240	0.0230	1,260.082 8
Gasoline/Service Station	0.172142	1.8600e- 003	0.0169	0.0142	1.0000e- 004		1.2800e- 003	1.2800e- 003		1.2800e- 003	1.2800e- 003		20.2521	20.2521	3.9000e- 004	3.7000e- 004	20.3724
High Turnover (Sit Down Restaurant)		0.0306	0.2784	0.2338	1.6700e- 003		0.0212	0.0212	 	0.0212	0.0212		334.0371	334.0371	6.4000e- 003	6.1200e- 003	336.0221
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.352603	3.8000e- 003	0.0346	0.0290	2.1000e- 004	 	2.6300e- 003	2.6300e- 003	 	2.6300e- 003	2.6300e- 003		41.4827	41.4827	8.0000e- 004	7.6000e- 004	41.7292
Unrefrigerated Warehouse-No Rail	0.372274	4.0100e- 003	0.0365	0.0307	2.2000e- 004		2.7700e- 003	2.7700e- 003		2.7700e- 003	2.7700e- 003		43.7969	43.7969	8.4000e- 004	8.0000e- 004	44.0572
Total		0.1949	1.7714	1.4880	0.0106		0.1346	0.1346		0.1346	0.1346		2,125.659 2	2,125.659 2	0.0407	0.0390	2,138.291 0

6.0 Area Detail

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Unmitigated	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	lay							lb/d	day		
Architectural Coating						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.8800e- 003	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Total	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	2.9512					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.00000	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717
Total	3.8537	2.8000e- 004	0.0313	0.0000		1.1000e- 004	1.1000e- 004		1.1000e- 004	1.1000e- 004		0.0673	0.0673	1.8000e- 004		0.0717

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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Richards Ranch Commercial - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

Santa Barbara-North of Santa Ynez County, Annual

1.0 Project Characteristics

1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

Precipitation Freq (Days)

37

1.2 Other Project Characteristics

Urban

Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (lb/MWhr)	152.51	CH4 Intensity (lb/MWhr)	0.025	N2O Intensity (lb/MWhr)	0.003

3.1

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Wind Speed (m/s)

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construction to reflect typical construction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValu e	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated NumberOfEquipmentMitigated NumberOfEquipmentMitigated Tier Tier	0.00 0.00 0.00 No Change	2.00 9.00 1.00 Tier 4 Final
tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated Tier Tier	0.00 No Change	1.00
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tblConstEquipMitigation	Tier		Tier 4 Final
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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	469.00
tblConstructionPhase	NumDays	440.00	557.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					ton	s/yr							MT	/yr		
2024	0.4842	2.7252	3.1470	7.0600e- 003	0.6277	0.1114	0.7391	0.2434	0.1039	0.3472	0.0000	634.4136	634.4136	0.1197	0.0165	642.3247
2025	1.1969	2.1805	3.3917	7.8000e- 003	0.3844	0.0790	0.4634	0.1031	0.0747	0.1778	0.0000	710.2800	710.2800	0.0870	0.0258	720.1370
2026	0.7291	1.2432	1.9524	4.3200e- 003	0.1995	0.0473	0.2468	0.0535	0.0446	0.0980	0.0000	393.3755	393.3755	0.0545	0.0126	398.4794
Maximum	1.1969	2.7252	3.3917	7.8000e- 003	0.6277	0.1114	0.7391	0.2434	0.1039	0.3472	0.0000	710.2800	710.2800	0.1197	0.0258	720.1370

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2024	0.2815	0.5769	3.4531	7.0600e- 003	0.3815	9.4800e- 003	0.3910	0.1316	9.3500e- 003	0.1409	0.0000	634.4131	634.4131	0.1197	0.0165	642.3242
2025	1.0428	0.7121	3.5742	7.8000e- 003	0.3844	9.2500e- 003	0.3937	0.1031	9.0500e- 003	0.1121	0.0000	710.2796	710.2796	0.0870	0.0258	720.1366
2026	0.6393	0.3702	2.0906	4.3200e- 003	0.1995	5.2600e- 003	0.2048	0.0535	5.1600e- 003	0.0586	0.0000	393.3753	393.3753	0.0545	0.0126	398.4791
Maximum	1.0428	0.7121	3.5742	7.8000e- 003	0.3844	9.4800e- 003	0.3937	0.1316	9.3500e- 003	0.1409	0.0000	710.2796	710.2796	0.1197	0.0258	720.1366

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	18.53	73.02	-7.38	0.00	20.32	89.91	31.73	27.95	89.44	49.97	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2024	3-31-2024	0.9235	0.0958
2	4-1-2024	6-30-2024	0.8517	0.1763
3	7-1-2024	9-30-2024	0.6172	0.2113
4	10-1-2024	12-31-2024	0.8056	0.3727
5	1-1-2025	3-31-2025	0.8345	0.4349
6	4-1-2025	6-30-2025	0.8359	0.4318
7	7-1-2025	9-30-2025	0.8451	0.4366
8	10-1-2025	12-31-2025	0.8530	0.4445
9	1-1-2026	3-31-2026	0.8289	0.4293
10	4-1-2026	6-30-2026	0.8306	0.4265
11	7-1-2026	9-30-2026	0.3127	0.1520
		Highest	0.9235	0.4445

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	⁻/yr		
Area	2.2371	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475
Energy	0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208		0.0208	0.0208	0.0000	442.3673	442.3673	0.0294	8.3000e- 003	445.5755
Mobile	0.5004	0.8933	4.9905	0.0133	1.5858	9.8700e- 003	1.5956	0.4225	9.2000e- 003	0.4317	0.0000	1,293.993 3	1,293.993 3	0.0855	0.0698	1,316.943 2
Waste	1					0.0000	0.0000		0.0000	0.0000	47.2850	0.0000	47.2850	2.3447	0.0000	105.9027
Water	1					0.0000	0.0000		0.0000	0.0000	11.4105	16.9951	28.4057	0.0421	0.0252	36.9514
Total	2.7676	1.1930	8.7719	0.0151	1.5858	0.0511	1.6368	0.4225	0.0504	0.4729	58.6955	1,759.359 4	1,818.054 9	2.5074	0.1033	1,911.520 3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Area	2.1983	0.0423	3.6720	1.9000e- 004		0.0204	0.0204	 	0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475
Energy	0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208	 	0.0208	0.0208	0.0000	442.3673	442.3673	0.0294	8.3000e- 003	445.5755
Mobile	0.4871	0.7706	4.3654	0.0106	1.2448	8.0800e- 003	1.2529	0.3317	7.5300e- 003	0.3392	0.0000	1,028.865 1	1,028.865 1	0.0756	0.0596	1,048.521 5
Waste	ii ii ii					0.0000	0.0000		0.0000	0.0000	23.6425	0.0000	23.6425	1.1724	0.0000	52.9513
Water	ii ii ii					0.0000	0.0000		0.0000	0.0000	9.1284	14.2804	23.4088	0.0338	0.0201	30.2522
Total	2.7156	1.0703	8.1469	0.0124	1.2448	0.0493	1.2941	0.3317	0.0487	0.3804	32.7709	1,491.516 5	1,524.287 4	1.3168	0.0881	1,583.448 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.88	10.29	7.13	17.98	21.50	3.51	20.94	21.50	3.31	19.56	44.17	15.22	16.16	47.48	14.75	17.16

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	·	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

(Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Paving Equipment	2	8.00		0.36
Paving	Rollers	2	8.00	80	0.38

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
Grubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Grubbing - 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					ton	s/yr							MT	/yr		
	0.0337	0.3132	0.2956	5.8000e- 004		0.0144	0.0144		0.0134	0.0134	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508
Total	0.0337	0.3132	0.2956	5.8000e- 004		0.0144	0.0144		0.0134	0.0134	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508

	ROG	NOx	СО	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					ton	s/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
	5.4000e- 004	3.7000e- 004	4.1000e- 003	1.0000e- 005	1.3900e- 003	1.0000e- 005	1.4000e- 003	3.7000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0459	1.0459	4.0000e- 005	3.0000e- 005	1.0570
Total	5.4000e- 004	3.7000e- 004	4.1000e- 003	1.0000e- 005	1.3900e- 003	1.0000e- 005	1.4000e- 003	3.7000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0459	1.0459	4.0000e- 005	3.0000e- 005	1.0570

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3.2 Grubbing - 2024

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
	6.9300e- 003	0.0301	0.3492	5.8000e- 004		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507
Total	6.9300e- 003	0.0301	0.3492	5.8000e- 004		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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
	5.4000e- 004	3.7000e- 004	4.1000e- 003	1.0000e- 005	1.3900e- 003	1.0000e- 005	1.4000e- 003	3.7000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0459	1.0459	4.0000e- 005	3.0000e- 005	1.0570
Total	5.4000e- 004	3.7000e- 004	4.1000e- 003	1.0000e- 005	1.3900e- 003	1.0000e- 005	1.4000e- 003	3.7000e- 004	1.0000e- 005	3.8000e- 004	0.0000	1.0459	1.0459	4.0000e- 005	3.0000e- 005	1.0570

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 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					ton	s/yr							MT	/yr		
Fugitive Dust					0.1966	0.0000	0.1966	0.1010	0.0000	0.1010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2718	0.1834	3.8000e- 004		0.0123	0.0123		0.0113	0.0113	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276
Total	0.0266	0.2718	0.1834	3.8000e- 004	0.1966	0.0123	0.2089	0.1010	0.0113	0.1123	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276

	ROG	NOx	СО	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					ton	s/yr							MT	/уг		
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
	4.3000e- 004	3.0000e- 004	3.2800e- 003	1.0000e- 005	1.1100e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	0.0000	3.0000e- 004	0.0000	0.8367	0.8367	3.0000e- 005	3.0000e- 005	0.8456
Total	4.3000e- 004	3.0000e- 004	3.2800e- 003	1.0000e- 005	1.1100e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	0.0000	3.0000e- 004	0.0000	0.8367	0.8367	3.0000e- 005	3.0000e- 005	0.8456

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3.3 Site Preparation - 2024 Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
T agiavo Baot	ii ii ii		1 1 1		0.0767	0.0000	0.0767	0.0394	0.0000	0.0394	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	4.6600e- 003	0.0202	0.2087	3.8000e- 004		6.2000e- 004	6.2000e- 004		6.2000e- 004	6.2000e- 004	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275
Total	4.6600e- 003	0.0202	0.2087	3.8000e- 004	0.0767	6.2000e- 004	0.0773	0.0394	6.2000e- 004	0.0400	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275

	ROG	NOx	СО	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					ton	s/yr							MT	/уг		
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	4.3000e- 004	3.0000e- 004	3.2800e- 003	1.0000e- 005	1.1100e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	0.0000	3.0000e- 004	0.0000	0.8367	0.8367	3.0000e- 005	3.0000e- 005	0.8456
Total	4.3000e- 004	3.0000e- 004	3.2800e- 003	1.0000e- 005	1.1100e- 003	1.0000e- 005	1.1200e- 003	3.0000e- 004	0.0000	3.0000e- 004	0.0000	0.8367	0.8367	3.0000e- 005	3.0000e- 005	0.8456

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 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					ton	s/yr							MT	/yr		
Fugitive Dust) 				0.2071	0.0000	0.2071	0.0822	0.0000	0.0822	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e- 003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608
Total	0.0724	0.7285	0.6238	1.4000e- 003	0.2071	0.0301	0.2371	0.0822	0.0276	0.1099	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
	1.0900e- 003	7.4000e- 004	8.2000e- 003	2.0000e- 005	2.7800e- 003	1.0000e- 005	2.7900e- 003	7.4000e- 004	1.0000e- 005	7.5000e- 004	0.0000	2.0918	2.0918	8.0000e- 005	7.0000e- 005	2.1140
Total	1.0900e- 003	7.4000e- 004	8.2000e- 003	2.0000e- 005	2.7800e- 003	1.0000e- 005	2.7900e- 003	7.4000e- 004	1.0000e- 005	7.5000e- 004	0.0000	2.0918	2.0918	8.0000e- 005	7.0000e- 005	2.1140

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3.4 Grading - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0808	0.0000	0.0808	0.0321	0.0000	0.0321	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.0743	0.7425	1.4000e- 003		2.2800e- 003	2.2800e- 003		2.2800e- 003	2.2800e- 003	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606
Total	0.0171	0.0743	0.7425	1.4000e- 003	0.0808	2.2800e- 003	0.0830	0.0321	2.2800e- 003	0.0343	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
	1.0900e- 003	7.4000e- 004	8.2000e- 003	2.0000e- 005	2.7800e- 003	1.0000e- 005	2.7900e- 003	7.4000e- 004	1.0000e- 005	7.5000e- 004	0.0000	2.0918	2.0918	8.0000e- 005	7.0000e- 005	2.1140
Total	1.0900e- 003	7.4000e- 004	8.2000e- 003	2.0000e- 005	2.7800e- 003	1.0000e- 005	2.7900e- 003	7.4000e- 004	1.0000e- 005	7.5000e- 004	0.0000	2.0918	2.0918	8.0000e- 005	7.0000e- 005	2.1140

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3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
	0.1229	1.1226	1.3499	2.2500e- 003		0.0512	0.0512		0.0482	0.0482	0.0000	193.5940	193.5940	0.0458	0.0000	194.7385
Total	0.1229	1.1226	1.3499	2.2500e- 003		0.0512	0.0512		0.0482	0.0482	0.0000	193.5940	193.5940	0.0458	0.0000	194.7385

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
1	5.3500e- 003	0.2104	0.0703	7.9000e- 004	0.0258	1.2100e- 003	0.0270	7.4300e- 003	1.1600e- 003	8.5900e- 003	0.0000	78.9577	78.9577	3.4500e- 003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e- 003	0.1836	8.7000e- 004	0.1845	0.0488	8.0000e- 004	0.0496	0.0000	138.1819	138.1819	4.9600e- 003	4.5000e- 003	139.6477
Total	0.0770	0.2591	0.6120	2.2700e- 003	0.2094	2.0800e- 003	0.2115	0.0562	1.9600e- 003	0.0582	0.0000	217.1396	217.1396	8.4100e- 003	0.0162	222.1620

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3.5 Building Construction - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0274	0.1866	1.4579	2.2500e- 003		3.4100e- 003	3.4100e- 003		3.4100e- 003	3.4100e- 003	0.0000	193.5938	193.5938	0.0458	0.0000	194.7383
Total	0.0274	0.1866	1.4579	2.2500e- 003		3.4100e- 003	3.4100e- 003		3.4100e- 003	3.4100e- 003	0.0000	193.5938	193.5938	0.0458	0.0000	194.7383

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3500e- 003	0.2104	0.0703	7.9000e- 004	0.0258	1.2100e- 003	0.0270	7.4300e- 003	1.1600e- 003	8.5900e- 003	0.0000	78.9577	78.9577	3.4500e- 003	0.0117	82.5143
Worker	0.0717	0.0488	0.5417	1.4800e- 003	0.1836	8.7000e- 004	0.1845	0.0488	8.0000e- 004	0.0496	0.0000	138.1819	138.1819	4.9600e- 003	4.5000e- 003	139.6477
Total	0.0770	0.2591	0.6120	2.2700e- 003	0.2094	2.0800e- 003	0.2115	0.0562	1.9600e- 003	0.0582	0.0000	217.1396	217.1396	8.4100e- 003	0.0162	222.1620

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							МТ	/yr		
	0.1785	1.6273	2.0991	3.5200e- 003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e- 003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	8.0000e- 003	0.3217	0.1073	1.2100e- 003	0.0403	1.8500e- 003	0.0421	0.0116	1.7700e- 003	0.0134	0.0000	121.1909	121.1909	5.5800e- 003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e- 003	0.2869	1.3000e- 003	0.2883	0.0763	1.2000e- 003	0.0775	0.0000	211.0274	211.0274	7.0600e- 003	6.5700e- 003	213.1607
Total	0.1133	0.3901	0.8987	3.4400e- 003	0.3272	3.1500e- 003	0.3304	0.0879	2.9700e- 003	0.0908	0.0000	332.2183	332.2183	0.0126	0.0245	339.8257

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3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0428	0.2916	2.2786	3.5200e- 003		5.3200e- 003	5.3200e- 003		5.3200e- 003	5.3200e- 003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.0428	0.2916	2.2786	3.5200e- 003		5.3200e- 003	5.3200e- 003		5.3200e- 003	5.3200e- 003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

	ROG	NOx	СО	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					ton	s/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	8.0000e- 003	0.3217	0.1073	1.2100e- 003	0.0403	1.8500e- 003	0.0421	0.0116	1.7700e- 003	0.0134	0.0000	121.1909	121.1909	5.5800e- 003	0.0179	126.6650
Worker	0.1053	0.0684	0.7914	2.2300e- 003	0.2869	1.3000e- 003	0.2883	0.0763	1.2000e- 003	0.0775	0.0000	211.0274	211.0274	7.0600e- 003	6.5700e- 003	213.1607
Total	0.1133	0.3901	0.8987	3.4400e- 003	0.3272	3.1500e- 003	0.3304	0.0879	2.9700e- 003	0.0908	0.0000	332.2183	332.2183	0.0126	0.0245	339.8257

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Off-Road	0.0882	0.8043	1.0375	1.7400e- 003		0.0340	0.0340		0.0320	0.0320	0.0000	149.5881	149.5881	0.0352	0.0000	150.4671
Total	0.0882	0.8043	1.0375	1.7400e- 003		0.0340	0.0340		0.0320	0.0320	0.0000	149.5881	149.5881	0.0352	0.0000	150.4671

	ROG	NOx	СО	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					ton	s/yr							МТ	/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
V on don	3.8000e- 003	0.1556	0.0520	5.9000e- 004	0.0199	8.9000e- 004	0.0208	5.7400e- 003	8.5000e- 004	6.5900e- 003	0.0000	58.8051	58.8051	2.8500e- 003	8.7000e- 003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e- 003	0.1418	6.0000e- 004	0.1424	0.0377	5.5000e- 004	0.0382	0.0000	101.7620	101.7620	3.1700e- 003	3.0400e- 003	102.7485
Total	0.0529	0.1861	0.4141	1.6600e- 003	0.1617	1.4900e- 003	0.1632	0.0434	1.4000e- 003	0.0448	0.0000	160.5671	160.5671	6.0200e- 003	0.0117	164.2169

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3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
	0.0211	0.1441	1.1262	1.7400e- 003		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	149.5879	149.5879	0.0352	0.0000	150.4670
Total	0.0211	0.1441	1.1262	1.7400e- 003		2.6300e- 003	2.6300e- 003		2.6300e- 003	2.6300e- 003	0.0000	149.5879	149.5879	0.0352	0.0000	150.4670

	ROG	NOx	СО	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					ton	s/yr							МТ	-/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
T VOLIGO	3.8000e- 003	0.1556	0.0520	5.9000e- 004	0.0199	8.9000e- 004	0.0208	5.7400e- 003	8.5000e- 004	6.5900e- 003	0.0000	58.8051	58.8051	2.8500e- 003	8.7000e- 003	61.4684
Worker	0.0491	0.0305	0.3621	1.0700e- 003	0.1418	6.0000e- 004	0.1424	0.0377	5.5000e- 004	0.0382	0.0000	101.7620	101.7620	3.1700e- 003	3.0400e- 003	102.7485
Total	0.0529	0.1861	0.4141	1.6600e- 003	0.1617	1.4900e- 003	0.1632	0.0434	1.4000e- 003	0.0448	0.0000	160.5671	160.5671	6.0200e- 003	0.0117	164.2169

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.8900e- 003	0.0262	0.0389	6.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	5.4895	5.4895	3.1000e- 004	0.0000	5.4972
Total	0.1459	0.0262	0.0389	6.0000e- 005		1.3100e- 003	1.3100e- 003		1.3100e- 003	1.3100e- 003	0.0000	5.4895	5.4895	3.1000e- 004	0.0000	5.4972

	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					ton	s/yr							МТ	/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	3.6800e- 003	2.5000e- 003	0.0278	8.0000e- 005	9.4300e- 003	4.0000e- 005	9.4700e- 003	2.5100e- 003	4.0000e- 005	2.5500e- 003	0.0000	7.0960	7.0960	2.5000e- 004	2.3000e- 004	7.1712
Total	3.6800e- 003	2.5000e- 003	0.0278	8.0000e- 005	9.4300e- 003	4.0000e- 005	9.4700e- 003	2.5100e- 003	4.0000e- 005	2.5500e- 003	0.0000	7.0960	7.0960	2.5000e- 004	2.3000e- 004	7.1712

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1420					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4000e- 004	2.7700e- 003	0.0394	6.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	5.4895	5.4895	3.1000e- 004	0.0000	5.4972
Total	0.1426	2.7700e- 003	0.0394	6.0000e- 005		9.0000e- 005	9.0000e- 005		9.0000e- 005	9.0000e- 005	0.0000	5.4895	5.4895	3.1000e- 004	0.0000	5.4972

	ROG	NOx	СО	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
WWOINCI	3.6800e- 003	2.5000e- 003	0.0278	8.0000e- 005	9.4300e- 003	4.0000e- 005	9.4700e- 003	2.5100e- 003	4.0000e- 005	2.5500e- 003	0.0000	7.0960	7.0960	2.5000e- 004	2.3000e- 004	7.1712
Total	3.6800e- 003	2.5000e- 003	0.0278	8.0000e- 005	9.4300e- 003	4.0000e- 005	9.4700e- 003	2.5100e- 003	4.0000e- 005	2.5500e- 003	0.0000	7.0960	7.0960	2.5000e- 004	2.3000e- 004	7.1712

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3.6 Architectural Coating - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.1495	0.2361	3.9000e- 004		6.7200e- 003	6.7200e- 003	1 1 1 1	6.7200e- 003	6.7200e- 003	0.0000	33.3200	33.3200	1.8200e- 003	0.0000	33.3654
Total	0.8841	0.1495	0.2361	3.9000e- 004		6.7200e- 003	6.7200e- 003		6.7200e- 003	6.7200e- 003	0.0000	33.3200	33.3200	1.8200e- 003	0.0000	33.3654

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0210	0.0136	0.1578	4.5000e- 004	0.0572	2.6000e- 004	0.0575	0.0152	2.4000e- 004	0.0155	0.0000	42.0869	42.0869	1.4100e- 003	1.3100e- 003	42.5124
Total	0.0210	0.0136	0.1578	4.5000e- 004	0.0572	2.6000e- 004	0.0575	0.0152	2.4000e- 004	0.0155	0.0000	42.0869	42.0869	1.4100e- 003	1.3100e- 003	42.5124

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3.6 Architectural Coating - 2025 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.8618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Oii Rodd	3.8800e- 003	0.0168	0.2391	3.9000e- 004		5.2000e- 004	5.2000e- 004	 	5.2000e- 004	5.2000e- 004	0.0000	33.3199	33.3199	1.8200e- 003	0.0000	33.3654
Total	0.8657	0.0168	0.2391	3.9000e- 004		5.2000e- 004	5.2000e- 004		5.2000e- 004	5.2000e- 004	0.0000	33.3199	33.3199	1.8200e- 003	0.0000	33.3654

	ROG	NOx	СО	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					ton	s/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	0.0210	0.0136	0.1578	4.5000e- 004	0.0572	2.6000e- 004	0.0575	0.0152	2.4000e- 004	0.0155	0.0000	42.0869	42.0869	1.4100e- 003	1.3100e- 003	42.5124
Total	0.0210	0.0136	0.1578	4.5000e- 004	0.0572	2.6000e- 004	0.0575	0.0152	2.4000e- 004	0.0155	0.0000	42.0869	42.0869	1.4100e- 003	1.3100e- 003	42.5124

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3.6 Architectural Coating - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0141	0.0945	0.1493	2.5000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	21.0643	21.0643	1.1500e- 003	0.0000	21.0931
Total	0.5589	0.0945	0.1493	2.5000e- 004		4.2500e- 003	4.2500e- 003		4.2500e- 003	4.2500e- 003	0.0000	21.0643	21.0643	1.1500e- 003	0.0000	21.0931

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0125	7.7800e- 003	0.0924	2.7000e- 004	0.0362	1.5000e- 004	0.0363	9.6100e- 003	1.4000e- 004	9.7500e- 003	0.0000	25.9590	25.9590	8.1000e- 004	7.8000e- 004	26.2107
Total	0.0125	7.7800e- 003	0.0924	2.7000e- 004	0.0362	1.5000e- 004	0.0363	9.6100e- 003	1.4000e- 004	9.7500e- 003	0.0000	25.9590	25.9590	8.1000e- 004	7.8000e- 004	26.2107

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3.6 Architectural Coating - 2026 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	tons/yr										MT/yr							
Archit. Coating	0.5448					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Off-Road	2.4500e- 003	0.0106	0.1512	2.5000e- 004		3.3000e- 004	3.3000e- 004		3.3000e- 004	3.3000e- 004	0.0000	21.0643	21.0643	1.1500e- 003	0.0000	21.0930		
Total	0.5473	0.0106	0.1512	2.5000e- 004		3.3000e- 004	3.3000e- 004		3.3000e- 004	3.3000e- 004	0.0000	21.0643	21.0643	1.1500e- 003	0.0000	21.0930		

	ROG	NOx	СО	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	0.0125	7.7800e- 003	0.0924	2.7000e- 004	0.0362	1.5000e- 004	0.0363	9.6100e- 003	1.4000e- 004	9.7500e- 003	0.0000	25.9590	25.9590	8.1000e- 004	7.8000e- 004	26.2107			
Total	0.0125	7.7800e- 003	0.0924	2.7000e- 004	0.0362	1.5000e- 004	0.0363	9.6100e- 003	1.4000e- 004	9.7500e- 003	0.0000	25.9590	25.9590	8.1000e- 004	7.8000e- 004	26.2107			

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3.7 Paving - 2026
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	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	0.0160	0.1502	0.2551	4.0000e- 004		7.3200e- 003	7.3200e- 003		6.7400e- 003	6.7400e- 003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170		
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0160	0.1502	0.2551	4.0000e- 004		7.3200e- 003	7.3200e- 003		6.7400e- 003	6.7400e- 003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170		

	ROG	NOx	СО	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			
	5.6000e- 004	3.5000e- 004	4.1400e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.1633	1.1633	4.0000e- 005	3.0000e- 005	1.1746			
Total	5.6000e- 004	3.5000e- 004	4.1400e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.1633	1.1633	4.0000e- 005	3.0000e- 005	1.1746			

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3.7 Paving - 2026

<u>Mitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
1	4.9100e- 003	0.0213	0.3027	4.0000e- 004		6.5000e- 004	6.5000e- 004		6.5000e- 004	6.5000e- 004	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.9100e- 003	0.0213	0.3027	4.0000e- 004		6.5000e- 004	6.5000e- 004		6.5000e- 004	6.5000e- 004	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e- 004	3.5000e- 004	4.1400e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.1633	1.1633	4.0000e- 005	3.0000e- 005	1.1746
Total	5.6000e- 004	3.5000e- 004	4.1400e- 003	1.0000e- 005	1.6200e- 003	1.0000e- 005	1.6300e- 003	4.3000e- 004	1.0000e- 005	4.4000e- 004	0.0000	1.1633	1.1633	4.0000e- 005	3.0000e- 005	1.1746

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	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					ton	s/yr							MT	/yr		
Mitigated	0.4871	0.7706	4.3654	0.0106	1.2448	8.0800e- 003	1.2529	0.3317	7.5300e- 003	0.3392	0.0000	1,028.865 1	1,028.865 1	0.0756	0.0596	1,048.521 5
Unmitigated	0.5004	0.8933	4.9905	0.0133	1.5858	9.8700e- 003	1.5956	0.4225	9.2000e- 003	0.4317	0.0000	1,293.993 3	1,293.993 3	0.0855	0.0698	1,316.943 2

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	144.2354	144.2354	0.0236	2.8400e- 003	145.6720
Electricity Unmitigated			 	i i	 	0.0000	0.0000		0.0000	0.0000	0.0000	144.2354	144.2354	0.0236	2.8400e- 003	145.6720
NaturalGas Mitigated	0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e- 003	5.4700e- 003	299.9035
NaturalGas Unmitigated	0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7100e- 003	5.4700e- 003	299.9035

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Apartments Low Rise	3.94712e +006	0.0213	0.1819	0.0774	1.1600e- 003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e- 003	3.8600e- 003	211.8848
Condo/Townhous e	1.63966e +006	8.8400e- 003	0.0756	0.0322	4.8000e- 004	 	6.1100e- 003	6.1100e- 003		6.1100e- 003	6.1100e- 003	0.0000	87.4987	87.4987	1.6800e- 003	1.6000e- 003	88.0187
Total		0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7200e- 003	5.4600e- 003	299.9035

Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Apartments Low Rise	3.94712e +006	0.0213	0.1819	0.0774	1.1600e- 003		0.0147	0.0147		0.0147	0.0147	0.0000	210.6331	210.6331	4.0400e- 003	3.8600e- 003	211.8848
Condo/Townhous e	1.63966e +006	8.8400e- 003	0.0756	0.0322	4.8000e- 004	 	6.1100e- 003	6.1100e- 003		6.1100e- 003	6.1100e- 003	0.0000	87.4987	87.4987	1.6800e- 003	1.6000e- 003	88.0187
Total		0.0301	0.2574	0.1095	1.6400e- 003		0.0208	0.0208		0.0208	0.0208	0.0000	298.1319	298.1319	5.7200e- 003	5.4600e- 003	299.9035

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	1.6244e +006	112.3720	0.0184	2.2100e- 003	113.4912
Condo/Townhous e	460605	31.8634	5.2200e- 003	6.3000e- 004	32.1808
Total		144.2354	0.0236	2.8400e- 003	145.6720

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Apartments Low Rise	1.6244e +006	112.3720	0.0184	2.2100e- 003	113.4912
Condo/Townhous e	460605	31.8634	5.2200e- 003	6.3000e- 004	32.1808
Total		144.2354	0.0236	2.8400e- 003	145.6720

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	СО	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					ton	s/yr							MT	⁻ /yr		
Mitigated	2.1983	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475
Unmitigated	2.2371	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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									
Coating	0.1936		 			0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1.9332				 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	, 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1103	0.0423	3.6720	1.9000e- 004		0.0204	0.0204	1	0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475
Total	2.2371	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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	ory tons/yr					MT/yr										
Architectural Coating	0.1549		1 1 1			0.0000	0.0000	 - -	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	1.9332		 		 	0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000	 	0.0000	0.0000	i i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1103	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475
Total	2.1983	0.0423	3.6720	1.9000e- 004		0.0204	0.0204		0.0204	0.0204	0.0000	6.0038	6.0038	5.7500e- 003	0.0000	6.1475

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e			
Category	MT/yr						
ga.ca	23.4088	0.0338	0.0201	30.2522			
Unmitigated	28.4057	0.0421	0.0252	36.9514			

7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e	
Land Use	Mgal	MT/yr				
Apartments Low Rise	26.0616 / 16.4301	22.9541	0.0340	0.0203	29.8597	
Condo/Townhous e	6.18963 / 3.90216	5.4516	8.0700e- 003	4.8300e- 003	7.0917	
Total		28.4057	0.0421	0.0252	36.9514	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	/yr	
Apartments Low Rise	20.8493 / 15.4279	18.9162	0.0273	0.0163	24.4462
Condo/Townhous e	4.95171 / 3.66413	1.7520	6.4800e- 003	3.8600e- 003	5.8060
Total		23.4088	0.0338	0.0201	30.2522

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e			
	MT/yr						
Willigatou	23.6425	1.1724	0.0000	52.9513			
Orinningatod	47.2850	2.3447	0.0000	105.9027			

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments Low Rise	184	38.2101	1.8947	0.0000	85.5779
Condo/Townhous e	43.7	9.0749	0.4500	0.0000	20.3248
Total		47.2850	2.3447	0.0000	105.9027

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8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
Apartments Low Rise	92	19.1050	0.9474	0.0000	42.7890		
Condo/Townhous e	21.85	4.5375	0.2250	0.0000	10.1624		
Total		23.6425	1.1724	0.0000	52.9513		

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

Santa Barbara-North of Santa Ynez County, Summer

1.0 Project Characteristics

1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

Precipitation Freq (Days)

37

1.2 Other Project Characteristics

Urban

Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas and Ele	ctric Company			
CO2 Intensity (lb/MWhr)	152.51	CH4 Intensity (lb/MWhr)	0.025	N2O Intensity (lb/MWhr)	0.003

3.1

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Wind Speed (m/s)

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construction to reflect typical construction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

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Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValu e	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated NumberOfEquipmentMitigated NumberOfEquipmentMitigated Tier Tier	0.00 0.00 0.00 No Change	2.00 9.00 1.00 Tier 4 Final
tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated Tier Tier	0.00 No Change	1.00
tblConstEquipMitigation tblConstEquipMitigation	Tier Tier	No Change	
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tblConstEquipMitigation		No Change	Tier 4 Final
to:oonot_qaipagation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	469.00
tblConstructionPhase	NumDays	440.00	557.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004

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tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	LHD2	6.4690e-003	1.0000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MCY	0.03	2.5000e-003
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MDV	0.14	0.06
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MH	3.4740e-003	2.5000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	MHD	0.01	7.4000e-003
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	OBUS	9.5300e-004	0.00
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	SBUS	3.3620e-003	5.0000e-004
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblFleetMix	UBUS	5.6000e-004	4.4000e-003
tblLandUse	LotAcreage	25.00	18.20
tblLandUse	LotAcreage	5.94	9.20
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	ST_TR	8.14	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	SU_TR	6.28	4.62
tblVehicleTrips	WD_TR	7.32	4.62
tblVehicleTrips	WD_TR	7.32	4.62
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2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2024	9.3359	32.4064	28.0817	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2199	6,194.024 2
2025	9.1578	16.5616	25.8547	0.0601	3.0109	0.6052	3.6161	0.8058	0.5723	1.3782	0.0000	6,041.015 0	6,041.015 0	0.7306	0.2130	6,122.749 9
2026	9.1001	16.4556	25.2937	0.0593	3.0109	0.6040	3.6149	0.8058	0.5712	1.3770	0.0000	5,969.195 2	5,969.195 2	0.7413	0.2066	6,048.915 9
Maximum	9.3359	32.4064	28.0817	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2199	6,194.024 2

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2024	8.0411	5.4264	33.3580	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2199	6,194.024 2
2025	7.9771	5.3098	27.2536	0.0601	3.0109	0.0709	3.0818	0.8058	0.0693	0.8751	0.0000	6,041.015 0	6,041.015 0	0.7306	0.2130	6,122.749 9
2026	7.9194	5.2039	26.6925	0.0593	3.0109	0.0697	3.0806	0.8058	0.0682	0.8740	0.0000	5,969.195 2	5,969.195 2	0.7413	0.2066	6,048.915 9
Maximum	8.0411	5.4264	33.3580	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,114.247 9	6,114.247 9	1.9471	0.2199	6,194.024 2

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	13.25	75.64	-10.19	0.00	46.49	90.47	50.39	52.47	89.90	58.76	0.00	0.00	0.00	0.00	0.00	0.00

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e- 003	 	0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Mobile	2.8664	4.6227	26.2752	0.0743	8.9080	0.0542	8.9622	2.3693	0.0506	2.4199		7,968.824 7	7,968.824 7	0.4965	0.4080	8,102.811 5
Total	15.9101	6.5032	67.6749	0.0855	8.9080	0.3947	9.3027	2.3693	0.3910	2.7603	0.0000	9,843.093 0	9,843.093 0	0.6014	0.4410	9,989.541 1

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Mobile	2.7932	3.9889	22.7313	0.0591	6.9927	0.0444	7.0371	1.8599	0.0414	1.9012		6,333.960 7	6,333.960 7	0.4358	0.3479	6,448.539 4
Total	15.6248	5.8695	64.1310	0.0703	6.9927	0.3848	7.3775	1.8599	0.3818	2.2417	0.0000	8,208.228 9	8,208.228 9	0.5407	0.3809	8,335.268 9

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.79	9.75	5.24	17.83	21.50	2.49	20.69	21.50	2.35	18.79	0.00	16.61	16.61	10.09	13.62	16.56

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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One die e	•		0.00	450	0.00
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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
Gr	ubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Sit	e Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Gr	ading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Bu	ilding Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Ard	chitectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Pa	ving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 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					lb/d	day							lb/c	lay		
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.422 8	3,747.422 8	1.0485		3,773.634 5
Total	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.422 8	3,747.422 8	1.0485		3,773.634 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0357	0.0221	0.2691	7.6000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		78.3745	78.3745	2.5900e- 003	2.3300e- 003	79.1343
Total	0.0357	0.0221	0.2691	7.6000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		78.3745	78.3745	2.5900e- 003	2.3300e- 003	79.1343

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3.2 Grubbing - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616	1 1 1	0.0616	0.0616	0.0000	3,747.422 8	3,747.422 8	1.0485		3,773.634 5
Total	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.422 8	3,747.422 8	1.0485		3,773.634 5

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0357	0.0221	0.2691	7.6000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		78.3745	78.3745	2.5900e- 003	2.3300e- 003	79.1343
Total	0.0357	0.0221	0.2691	7.6000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		78.3745	78.3745	2.5900e- 003	2.3300e- 003	79.1343

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3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	19.6570	1.2294	20.8864	10.1025	1.1310	11.2335		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611
Total	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust	ii ii ii				7.6662	0.0000	7.6662	3.9400	0.0000	3.9400		i i	0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	0.4656	2.0175	20.8690	0.0381	7.6662	0.0621	7.7283	3.9400	0.0621	4.0020	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611
Total	0.0428	0.0265	0.3230	9.1000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		94.0493	94.0493	3.1100e- 003	2.8000e- 003	94.9611

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 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					lb/d	day							lb/d	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621	 	1.3354	1.3354		1.2286	1.2286		6,009.748 7	6,009.748 7	1.9437	 	6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	9.2036	1.3354	10.5390	3.6538	1.2286	4.8823		6,009.748 7	6,009.748 7	1.9437		6,058.340 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124
Total	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621	 	0.1015	0.1015	 	0.1015	0.1015	0.0000	6,009.748 7	6,009.748 7	1.9437	 	6,058.340 5
Total	0.7616	3.3000	32.9991	0.0621	3.5894	0.1015	3.6909	1.4250	0.1015	1.5265	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124
Total	0.0475	0.0295	0.3588	1.0100e- 003	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		104.4993	104.4993	3.4500e- 003	3.1100e- 003	105.5124

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0647	2.4338	0.8304	9.4800e- 003	0.3142	0.0145	0.3287	0.0904	0.0139	0.1043		1,041.792 9	1,041.792 9	0.0456	0.1535	1,088.683 4
Worker	0.8460	0.5245	6.3873	0.0180	2.2483	0.0105	2.2588	0.5965	9.6200e- 003	0.6061		1,860.086 9	1,860.086 9	0.0615	0.0554	1,878.120 1
Total	0.9107	2.9583	7.2177	0.0275	2.5625	0.0250	2.5875	0.6869	0.0235	0.7104		2,901.879 8	2,901.879 8	0.1071	0.2089	2,966.803 4

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408	 	0.0408	0.0408	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0647	2.4338	0.8304	9.4800e- 003	0.3142	0.0145	0.3287	0.0904	0.0139	0.1043		1,041.792 9	1,041.792 9	0.0456	0.1535	1,088.683 4
Worker	0.8460	0.5245	6.3873	0.0180	2.2483	0.0105	2.2588	0.5965	9.6200e- 003	0.6061		1,860.086 9	1,860.086 9	0.0615	0.0554	1,878.120 1
Total	0.9107	2.9583	7.2177	0.0275	2.5625	0.0250	2.5875	0.6869	0.0235	0.7104		2,901.879 8	2,901.879 8	0.1071	0.2089	2,966.803 4

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276	1 1 1	0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0619	2.3818	0.8109	9.2900e- 003	0.3142	0.0142	0.3284	0.0904	0.0135	0.1040		1,023.111 9	1,023.111 9	0.0472	0.1510	1,069.293 7
Worker	0.7949	0.4707	5.9611	0.0174	2.2483	9.9700e- 003	2.2583	0.5965	9.1800e- 003	0.6056		1,817.501 5	1,817.501 5	0.0559	0.0517	1,834.297 3
Total	0.8569	2.8525	6.7720	0.0267	2.5625	0.0241	2.5866	0.6869	0.0227	0.7096		2,840.613 4	2,840.613 4	0.1031	0.2027	2,903.591 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0619	2.3818	0.8109	9.2900e- 003	0.3142	0.0142	0.3284	0.0904	0.0135	0.1040		1,023.111 9	1,023.111 9	0.0472	0.1510	1,069.293 7
Worker	0.7949	0.4707	5.9611	0.0174	2.2483	9.9700e- 003	2.2583	0.5965	9.1800e- 003	0.6056		1,817.501 5	1,817.501 5	0.0559	0.0517	1,834.297 3
Total	0.8569	2.8525	6.7720	0.0267	2.5625	0.0241	2.5866	0.6869	0.0227	0.7096		2,840.613 4	2,840.613 4	0.1031	0.2027	2,903.591 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	0.0595	2.3305	0.7949	9.1100e- 003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1036		1,004.408 3	1,004.408 3	0.0487	0.1485	1,049.870 6		
Worker	0.7489	0.4252	5.5067	0.0169	2.2483	9.2900e- 003	2.2576	0.5965	8.5500e- 003	0.6050		1,773.217 3	1,773.217 3	0.0507	0.0485	1,788.933 6		
Total	0.8084	2.7557	6.3016	0.0260	2.5625	0.0231	2.5856	0.6869	0.0217	0.7086		2,777.625 6	2,777.625 6	0.0994	0.1970	2,838.804 2		

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day									lb/day							
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1	
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1	

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		
Vendor	0.0595	2.3305	0.7949	9.1100e- 003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1036		1,004.408 3	1,004.408 3	0.0487	0.1485	1,049.870 6		
Worker	0.7489	0.4252	5.5067	0.0169	2.2483	9.2900e- 003	2.2576	0.5965	8.5500e- 003	0.6050		1,773.217 3	1,773.217 3	0.0507	0.0485	1,788.933 6		
Total	0.8084	2.7557	6.3016	0.0260	2.5625	0.0231	2.5856	0.6869	0.0217	0.7086		2,777.625 6	2,777.625 6	0.0994	0.1970	2,838.804 2		

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159	 	281.8443		
Total	6.7849	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443		

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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		
Worker	0.1687	0.1046	1.2739	3.6000e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689		
Total	0.1687	0.1046	1.2739	3.6000e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689		

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.1687	0.1046	1.2739	3.6000e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689
Total	0.1687	0.1046	1.2739	3.6000e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		370.9724	370.9724	0.0123	0.0110	374.5689

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	6.7750	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/d	lay					
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	0.0000	0.0000	0.0000	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	0.1585	0.0939	1.1889	3.4800e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290
Total	0.1585	0.0939	1.1889	3.4800e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003	i I	3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1585	0.0939	1.1889	3.4800e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290
Total	0.1585	0.0939	1.1889	3.4800e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		362.4792	362.4792	0.0112	0.0103	365.8290

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	6.7750	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1494	0.0848	1.0983	3.3700e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		353.6473	353.6473	0.0101	9.6700e- 003	356.7817
Total	0.1494	0.0848	1.0983	3.3700e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		353.6473	353.6473	0.0101	9.6700e- 003	356.7817

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0297	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154	 	281.8319
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1494	0.0848	1.0983	3.3700e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		353.6473	353.6473	0.0101	9.6700e- 003	356.7817
Total	0.1494	0.0848	1.0983	3.3700e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		353.6473	353.6473	0.0101	9.6700e- 003	356.7817

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0316	0.0179	0.2320	7.1000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		74.7142	74.7142	2.1400e- 003	2.0400e- 003	75.3764
Total	0.0316	0.0179	0.2320	7.1000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		74.7142	74.7142	2.1400e- 003	2.0400e- 003	75.3764

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	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
Worker	0.0316	0.0179	0.2320	7.1000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		74.7142	74.7142	2.1400e- 003	2.0400e- 003	75.3764
Total	0.0316	0.0179	0.2320	7.1000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		74.7142	74.7142	2.1400e- 003	2.0400e- 003	75.3764

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	2.7932	3.9889	22.7313	0.0591	6.9927	0.0444	7.0371	1.8599	0.0414	1.9012		6,333.960 7	6,333.960 7	0.4358	0.3479	6,448.539 4
Unmitigated	2.8664	4.6227	26.2752	0.0743	8.9080	0.0542	8.9622	2.3693	0.0506	2.4199		7,968.824 7	7,968.824 7	0.4965	0.4080	8,102.811 5

4.2 Trip Summary Information

	Ave	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Unmitigated	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	ay		
Apartments Low Rise	10814	0.1166	0.9966	0.4241	6.3600e- 003		0.0806	0.0806		0.0806	0.0806		1,272.237 2	1,272.237 2	0.0244	0.0233	1,279.797 5
Condo/Townhous e	4492.23	0.0485	0.4140	0.1762	2.6400e- 003	 	0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e- 003	531.6382
Total		0.1651	1.4106	0.6003	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Low Rise	10.814	0.1166	0.9966	0.4241	6.3600e- 003		0.0806	0.0806		0.0806	0.0806		1,272.237 2	1,272.237 2	0.0244	0.0233	1,279.797 5
Condo/Townhous e	4.49223	0.0485	0.4140	0.1762	2.6400e- 003		0.0335	0.0335	 	0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e- 003	531.6382
Total		0.1651	1.4106	0.6003	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

6.0 Area Detail

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Unmitigated	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Coating	1.0607					0.0000	0.0000	! ! !	0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930				 	0.0000	0.0000	 	0.0000	0.0000		i i	0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/c	lay		
	0.8486				i i	0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e- 003	 	0.2264	0.2264	 	0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Richards Ranch Annexation Project Residential

Santa Barbara-North of Santa Ynez County, Winter

1.0 Project Characteristics

1.1 Land Usage

Urbanization

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	400.00	Dwelling Unit	18.20	400,000.00	1088
Condo/Townhouse	95.00	Dwelling Unit	9.20	95,000.00	258

Precipitation Freq (Days)

37

1.2 Other Project Characteristics

Urban

Climate Zone	4			Operational Year	2027
Utility Company	Pacific Gas and E	Electric Company			
CO2 Intensity (lb/MWhr)	152.51	CH4 Intensity (lb/MWhr)	0.025	N2O Intensity (lb/MWhr)	0.003

3.1

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Intensity factor based on Renewable Portfolio Standard for PG&E in 2027.

Wind Speed (m/s)

Land Use - Lot Acreage is based on Site Plan

Construction Phase - Building Construction is based on construction schedule and Arch Coating is spread out during construction to reflect typical construction phasing practices. Rest of phasing is left as default.

Trips and VMT -

Demolition - No exsisting building are on site, left phase to account for potential vegitation removal

Grading - No info is avaliable as of (3/28)

Architectural Coating - Use Low VOC paints (50 g/L)

Vehicle Trips - Trip rates are based on Traffic Study with 30% reduction to account for internal trips.

Area Coating - Low VOC Paints

Construction Off-road Equipment Mitigation - Tier 4 and water exposed area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mobile Land Use Mitigation - Project will improve pedestian network and will be located 0.14 miles from a bus stop.

Area Mitigation - Use Low VOC Paints

Water Mitigation -

Waste Mitigation -

Fleet Mix - SJVAPCD Fleet Mix for residential used.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	50.00
tblArchitecturalCoating	EF_Residential_Exterior	100.00	50.00
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorV alue	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	50
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValu e	100	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated NumberOfEquipmentMitigated NumberOfEquipmentMitigated Tier Tier	0.00 0.00 0.00 No Change	2.00 9.00 1.00 Tier 4 Final
tblConstEquipMitigation tblConstEquipMitigation tblConstEquipMitigation	NumberOfEquipmentMitigated Tier Tier	0.00 No Change	1.00
tblConstEquipMitigation tblConstEquipMitigation	Tier Tier	No Change	
tblConstEquipMitigation	Tier		Tier 4 Final
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tblConstEquipMitigation		No Change	Tier 4 Final
to:oonot_qaipagation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	469.00
tblConstructionPhase	NumDays	440.00	557.00
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	HHD	6.2590e-003	0.02
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDA	0.51	0.52
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT1	0.06	0.22
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LDT2	0.21	0.17
tblFleetMix	LHD1	0.03	8.0000e-004
tblFleetMix	LHD1	0.03	8.0000e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	LHD2	6.4690e-003	1.0000e-003		
tblFleetMix	LHD2	6.4690e-003	1.0000e-003		
tblFleetMix	MCY	0.03	2.5000e-003		
tblFleetMix	MCY	0.03	2.5000e-003		
tblFleetMix	MDV	0.14	0.06		
tblFleetMix	MDV	0.14	0.06		
tblFleetMix	MH	3.4740e-003	2.5000e-003		
tblFleetMix	MH	3.4740e-003	2.5000e-003		
tblFleetMix	MHD	0.01	7.4000e-003		
tblFleetMix	MHD	0.01	7.4000e-003		
tblFleetMix	OBUS	9.5300e-004	0.00		
tblFleetMix	OBUS	9.5300e-004	0.00		
tblFleetMix	SBUS	3.3620e-003	5.0000e-004		
tblFleetMix	SBUS	3.3620e-003	5.0000e-004		
tblFleetMix	UBUS	5.6000e-004	4.4000e-003		
tblFleetMix	UBUS	5.6000e-004	4.4000e-003		
tblLandUse	LotAcreage	25.00	18.20		
tblLandUse	LotAcreage	5.94	9.20		
tblProjectCharacteristics	CH4IntensityFactor	0.033	0.025		
tblProjectCharacteristics	CO2IntensityFactor	203.98	152.51		
tblProjectCharacteristics	N2OIntensityFactor	0.004	0.003		
tblVehicleTrips	ST_TR	8.14	4.62		
tblVehicleTrips	ST_TR	8.14	4.62		
tblVehicleTrips	SU_TR	6.28	4.62		
tblVehicleTrips	SU_TR	6.28	4.62		
tblVehicleTrips	WD_TR	7.32	4.62		
tblVehicleTrips	WD_TR	7.32	4.62		

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day									lb/day						
2024	9.4263	32.4106	28.0973	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2266	6,161.826 3
2025	9.2448	16.7173	26.2068	0.0597	3.0109	0.6052	3.6162	0.8058	0.5724	1.3782	0.0000	5,998.183 2	5,998.183 2	0.7377	0.2192	6,081.942 0
2026	9.1845	16.6025	25.6422	0.0589	3.0109	0.6040	3.6150	0.8058	0.5713	1.3771	0.0000	5,927.506 4	5,927.506 4	0.7427	0.2124	6,009.124 4
Maximum	9.4263	32.4106	28.0973	0.0631	19.7707	1.3360	21.0006	10.1326	1.2291	11.2641	0.0000	6,112.124 3	6,112.124	1.9475	0.2266	6,161.826 3

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/d	lay				
2024	8.1315	5.5925	33.3736	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2266	6,161.826 3
2025	8.0640	5.4656	27.6057	0.0597	3.0109	0.0709	3.0818	0.8058	0.0694	0.8752	0.0000	5,998.183 2	5,998.183 2	0.7377	0.2192	6,081.942 0
2026	8.0037	5.3508	27.0410	0.0589	3.0109	0.0697	3.0806	0.8058	0.0682	0.8741	0.0000	5,927.506 4	5,927.506 4	0.7427	0.2124	6,009.124 4
Maximum	8.1315	5.5925	33.3736	0.0631	7.7799	0.1021	7.8425	3.9701	0.1021	4.0327	0.0000	6,112.124 3	6,112.124 3	1.9475	0.2266	6,161.826 3

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	13.13	75.04	-10.10	0.00	46.49	90.46	50.39	52.47	89.90	58.76	0.00	0.00	0.00	0.00	0.00	0.00

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Mobile	2.7534	4.9799	28.5158	0.0731	8.9080	0.0543	8.9623	2.3693	0.0507	2.4199		7,842.144 2	7,842.144 2	0.5322	0.4293	7,983.366 3
Total	15.7972	6.8604	69.9155	0.0843	8.9080	0.3948	9.3027	2.3693	0.3911	2.7604	0.0000	9,716.412 5	9,716.412 5	0.6371	0.4623	9,870.095 9

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Area	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Energy	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Mobile	2.6802	4.3070	25.0678	0.0582	6.9927	0.0445	7.0372	1.8599	0.0415	1.9013		6,236.096 7	6,236.096 7	0.4719	0.3672	6,357.305 0
Total	15.5118	6.1876	66.4675	0.0693	6.9927	0.3849	7.3776	1.8599	0.3819	2.2418	0.0000	8,110.364 9	8,110.364 9	0.5768	0.4002	8,244.034 6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	1.81	9.81	4.93	17.76	21.50	2.49	20.69	21.50	2.35	18.79	0.00	16.53	16.53	9.46	13.43	16.47

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grubbing	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Building Construction	Building Construction	5/11/2024	6/30/2026	5	557	
5	Architectural Coating	Architectural Coating	11/1/2024	8/19/2026	5	469	
6	Paving	Paving	7/1/2026	8/18/2026	5	35	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 135

Acres of Paving: 0

Residential Indoor: 1,002,375; Residential Outdoor: 334,125; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grubbing	Concrete/Industrial Saws	1	8.00	81	0.73
Grubbing	Excavators	3	8.00	158	0.38
Grubbing	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
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

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
Gr	ubbing	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Sit	e Preparation	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Gr	ading	8	20.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Bu	ilding Construction	9	356.00	53.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Ard	chitectural Coating	1	71.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Pa	ving	6	15.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

3.2 Grubbing - 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					lb/d	day							lb/c	lay		
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.422 8	3,747.422 8	1.0485		3,773.634 5
Total	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.422 8	3,747.422 8	1.0485		3,773.634 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0389	0.0253	0.2809	7.4000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		76.7817	76.7817	2.8700e- 003	2.5500e- 003	77.6143
Total	0.0389	0.0253	0.2809	7.4000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		76.7817	76.7817	2.8700e- 003	2.5500e- 003	77.6143

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Grubbing - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.422 8	3,747.422 8	1.0485		3,773.634 5
Total	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.422 8	3,747.422 8	1.0485		3,773.634 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0389	0.0253	0.2809	7.4000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		76.7817	76.7817	2.8700e- 003	2.5500e- 003	77.6143
Total	0.0389	0.0253	0.2809	7.4000e- 004	0.0947	4.4000e- 004	0.0952	0.0251	4.1000e- 004	0.0255		76.7817	76.7817	2.8700e- 003	2.5500e- 003	77.6143

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	2.6609	27.1760	18.3356	0.0381	19.6570	1.2294	20.8864	10.1025	1.1310	11.2335		3,688.010 0	3,688.010 0	1.1928		3,717.829 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372
Total	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024 Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4
Total	0.4656	2.0175	20.8690	0.0381	7.6662	0.0621	7.7283	3.9400	0.0621	4.0020	0.0000	3,688.010 0	3,688.010 0	1.1928		3,717.829 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372
Total	0.0466	0.0303	0.3370	8.9000e- 004	0.1137	5.3000e- 004	0.1142	0.0302	4.9000e- 004	0.0306		92.1380	92.1380	3.4400e- 003	3.0600e- 003	93.1372

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024
Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.748 7	6,009.748 7	1.9437		6,058.340 5
Total	3.2181	32.3770	27.7228	0.0621	9.2036	1.3354	10.5390	3.6538	1.2286	4.8823		6,009.748 7	6,009.748 7	1.9437		6,058.340 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858
Total	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5
Total	0.7616	3.3000	32.9991	0.0621	3.5894	0.1015	3.6909	1.4250	0.1015	1.5265	0.0000	6,009.748 7	6,009.748 7	1.9437		6,058.340 5

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858
Total	0.0518	0.0337	0.3745	9.9000e- 004	0.1263	5.9000e- 004	0.1269	0.0335	5.4000e- 004	0.0341		102.3756	102.3756	3.8300e- 003	3.4000e- 003	103.4858

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0636	2.5099	0.8539	9.5000e- 003	0.3142	0.0146	0.3288	0.0904	0.0139	0.1044		1,043.124 8	1,043.124 8	0.0454	0.1539	1,090.113 3
Worker	0.9223	0.5996	6.6659	0.0177	2.2483	0.0105	2.2588	0.5965	9.6200e- 003	0.6061		1,822.285 4	1,822.285 4	0.0681	0.0606	1,842.046 4
Total	0.9859	3.1095	7.5198	0.0272	2.5625	0.0250	2.5875	0.6869	0.0236	0.7105		2,865.410 2	2,865.410	0.1135	0.2145	2,932.159 7

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0636	2.5099	0.8539	9.5000e- 003	0.3142	0.0146	0.3288	0.0904	0.0139	0.1044		1,043.124 8	1,043.124 8	0.0454	0.1539	1,090.113 3
Worker	0.9223	0.5996	6.6659	0.0177	2.2483	0.0105	2.2588	0.5965	9.6200e- 003	0.6061		1,822.285 4	1,822.285 4	0.0681	0.0606	1,842.046 4
Total	0.9859	3.1095	7.5198	0.0272	2.5625	0.0250	2.5875	0.6869	0.0236	0.7105		2,865.410 2	2,865.410 2	0.1135	0.2145	2,932.159 7

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276	1 1 1	0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category				lb/d	lb/day											
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0608	2.4567	0.8341	9.3100e- 003	0.3142	0.0142	0.3284	0.0904	0.0136	0.1040		1,024.474 3	1,024.474 3	0.0470	0.1514	1,070.751 0
Worker	0.8684	0.5381	6.2353	0.0171	2.2483	9.9700e- 003	2.2583	0.5965	9.1800e- 003	0.6056		1,780.655 7	1,780.655 7	0.0620	0.0566	1,799.059 8
Total	0.9292	2.9948	7.0694	0.0264	2.5625	0.0242	2.5867	0.6869	0.0228	0.7097		2,805.130 0	2,805.130 0	0.1090	0.2079	2,869.810 8

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1			
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1			

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category				lb/d	lb/day											
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0608	2.4567	0.8341	9.3100e- 003	0.3142	0.0142	0.3284	0.0904	0.0136	0.1040		1,024.474 3	1,024.474 3	0.0470	0.1514	1,070.751 0
Worker	0.8684	0.5381	6.2353	0.0171	2.2483	9.9700e- 003	2.2583	0.5965	9.1800e- 003	0.6056		1,780.655 7	1,780.655 7	0.0620	0.0566	1,799.059 8
Total	0.9292	2.9948	7.0694	0.0264	2.5625	0.0242	2.5867	0.6869	0.0228	0.7097		2,805.130 0	2,805.130 0	0.1090	0.2079	2,869.810 8

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day											lb/day						
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1		
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474 4	2,556.474 4	0.6010		2,571.498 1		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category			lb/d	lb/day												
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.4043	0.8178	9.1200e- 003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1037		1,005.792 7	1,005.792 7	0.0485	0.1488	1,051.347 2
Worker	0.8203	0.4861	5.7782	0.0165	2.2483	9.2900e- 003	2.2576	0.5965	8.5500e- 003	0.6050		1,737.306 1	1,737.306 1	0.0564	0.0531	1,754.527 5
Total	0.8785	2.8904	6.5960	0.0257	2.5625	0.0231	2.5856	0.6869	0.0218	0.7087		2,743.098 8	2,743.098 8	0.1049	0.2019	2,805.874 7

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408	1 1 1	0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1			
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.474 4	2,556.474 4	0.6010		2,571.498 1			

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category			lb/d	lb/day												
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0582	2.4043	0.8178	9.1200e- 003	0.3142	0.0138	0.3280	0.0904	0.0132	0.1037		1,005.792 7	1,005.792 7	0.0485	0.1488	1,051.347 2
Worker	0.8203	0.4861	5.7782	0.0165	2.2483	9.2900e- 003	2.2576	0.5965	8.5500e- 003	0.6050		1,737.306 1	1,737.306 1	0.0564	0.0531	1,754.527 5
Total	0.8785	2.8904	6.5960	0.0257	2.5625	0.0231	2.5856	0.6869	0.0218	0.7087		2,743.098 8	2,743.098 8	0.1049	0.2019	2,805.874 7

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e- 003	 	0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	6.7849	1.2188	1.8101	2.9700e- 003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.1839	0.1196	1.3294	3.5200e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744
Total	0.1839	0.1196	1.3294	3.5200e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1839	0.1196	1.3294	3.5200e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744
Total	0.1839	0.1196	1.3294	3.5200e- 003	0.4484	2.0800e- 003	0.4505	0.1190	1.9200e- 003	0.1209		363.4333	363.4333	0.0136	0.0121	367.3744

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154	 	281.8319
Total	6.7750	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.1732	0.1073	1.2436	3.4100e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013
Total	0.1732	0.1073	1.2436	3.4100e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2025 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1732	0.1073	1.2436	3.4100e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013
Total	0.1732	0.1073	1.2436	3.4100e- 003	0.4484	1.9900e- 003	0.4504	0.1190	1.8300e- 003	0.1208		355.1308	355.1308	0.0124	0.0113	358.8013

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154	 	281.8319
Total	6.7750	1.1455	1.8091	2.9700e- 003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.1636	0.0969	1.1524	3.3000e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198
Total	0.1636	0.0969	1.1524	3.3000e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2026 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	6.6041					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e- 003	 	3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	6.6338	0.1288	1.8324	2.9700e- 003		3.9600e- 003	3.9600e- 003		3.9600e- 003	3.9600e- 003	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.1636	0.0969	1.1524	3.3000e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198
Total	0.1636	0.0969	1.1524	3.3000e- 003	0.4484	1.8500e- 003	0.4503	0.1190	1.7100e- 003	0.1207		346.4852	346.4852	0.0113	0.0106	349.9198

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.745 2	2,206.745	0.7137		2,224.587 8

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0346	0.0205	0.2435	7.0000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		73.2011	73.2011	2.3800e- 003	2.2400e- 003	73.9267
Total	0.0346	0.0205	0.2435	7.0000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		73.2011	73.2011	2.3800e- 003	2.2400e- 003	73.9267

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2026

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8
Paving	0.0000		1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,206.745 2	2,206.745 2	0.7137		2,224.587 8

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0346	0.0205	0.2435	7.0000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		73.2011	73.2011	2.3800e- 003	2.2400e- 003	73.9267
Total	0.0346	0.0205	0.2435	7.0000e- 004	0.0947	3.9000e- 004	0.0951	0.0251	3.6000e- 004	0.0255		73.2011	73.2011	2.3800e- 003	2.2400e- 003	73.9267

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	2.6802	4.3070	25.0678	0.0582	6.9927	0.0445	7.0372	1.8599	0.0415	1.9013		6,236.096 7	6,236.096 7	0.4719	0.3672	6,357.305 0
Unmitigated	2.7534	4.9799	28.5158	0.0731	8.9080	0.0543	8.9623	2.3693	0.0507	2.4199		7,842.144 2	7,842.144 2	0.5322	0.4293	7,983.366 3

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	te	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,848.00	1,848.00	1848.00	3,423,285	2,687,244
Condo/Townhouse	438.90	438.90	438.90	813,030	638,220
Total	2,286.90	2,286.90	2,286.90	4,236,315	3,325,464

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3
Condo/Townhouse	8.30	4.50	4.90	25.60	9.90	64.50	86	11	3

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Apartments Low Rise	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500
Condo/Townhouse	0.518500	0.217000	0.168400	0.057500	0.000800	0.001000	0.007400	0.019500	0.000000	0.004400	0.002500	0.000500	0.002500

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7
Unmitigated	0.1651	1.4106	0.6002	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Low Rise	10814	0.1166	0.9966	0.4241	6.3600e- 003		0.0806	0.0806		0.0806	0.0806		1,272.237 2	1,272.237 2	0.0244	0.0233	1,279.797 5
Condo/Townhous e	4492.23	0.0485	0.4140	0.1762	2.6400e- 003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e- 003	531.6382
Total		0.1651	1.4106	0.6003	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Low Rise	10.814	0.1166	0.9966	0.4241	6.3600e- 003		0.0806	0.0806		0.0806	0.0806		1,272.237 2	1,272.237 2	0.0244	0.0233	1,279.797 5
Condo/Townhous e	4.49223	0.0485	0.4140	0.1762	2.6400e- 003		0.0335	0.0335		0.0335	0.0335		528.4976	528.4976	0.0101	9.6900e- 003	531.6382
Total		0.1651	1.4106	0.6003	9.0000e- 003		0.1141	0.1141		0.1141	0.1141		1,800.734 9	1,800.734 9	0.0345	0.0330	1,811.435 7

6.0 Area Detail

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938
Unmitigated	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/day											
Coating	1.0607		! !			0.0000	0.0000	i i i	0.0000	0.0000			0.0000			0.0000
Consumer Products	10.5930		,			0.0000	0.0000	,	0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000	 - - -	0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2250	0.4700	40.7994	2.1600e- 003		0.2264	0.2264	,	0.2264	0.2264		73.5334	73.5334	0.0704		75.2938
Total	12.8787	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
SubCategory		lb/day											lb/day						
	0.8486				i i	0.0000	0.0000	 	0.0000	0.0000			0.0000			0.0000			
Consumer Products	10.5930					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000			
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Landscaping	1.2250	0.4700	40.7994	2.1600e- 003	 	0.2264	0.2264	 	0.2264	0.2264		73.5334	73.5334	0.0704		75.2938			
Total	12.6666	0.4700	40.7994	2.1600e- 003		0.2264	0.2264		0.2264	0.2264	0.0000	73.5334	73.5334	0.0704	0.0000	75.2938			

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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Richards Ranch Annexation Project Residential - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

1					
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Internal Trips ONLY

Santa Barbara-North of Santa Ynez County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37

Climate Zone 4 Operational Year 2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Internal Trips VMT only

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	5.50	623.43
tblVehicleTrips	CC_TTP	64.70	100.00
tblVehicleTrips	CNW_TL	6.40	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	6.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	46.12	1.00
tblVehicleTrips	SU_TR	21.10	1.00
tblVehicleTrips	WD_TR	37.75	1.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9291
Maximum	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9291

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Year		tons/yr										MT/yr						
	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9290		
Maximum	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9290		

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

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-6-2023	5-5-2023	0.2242	0.2242
2	5-6-2023	8-5-2023	0.2020	0.2020
		Highest	0.2242	0.2242

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Area	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	1.0862	1.0862	1.6000e- 004	2.0000e- 005	1.0964
Mobile	0.0178	0.0404	0.2721	7.1000e- 004	0.0855	5.0000e- 004	0.0860	0.0229	4.6000e- 004	0.0234	0.0000	65.7378	65.7378	2.8400e- 003	2.6900e- 003	66.6103
Waste	1 1 1					0.0000	0.0000		0.0000	0.0000	0.2181	0.0000	0.2181	0.0108	0.0000	0.4884
Water	1 1 1					0.0000	0.0000		0.0000	0.0000	0.0262	0.0518	0.0780	1.0000e- 004	6.0000e- 005	0.0977
Total	0.0229	0.0405	0.2722	7.1000e- 004	0.0855	5.1000e- 004	0.0860	0.0229	4.7000e- 004	0.0234	0.2443	66.8758	67.1201	0.0139	2.7700e- 003	68.2928

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	1.0862	1.0862	1.6000e- 004	2.0000e- 005	1.0964
Mobile	0.0178	0.0404	0.2721	7.1000e- 004	0.0855	5.0000e- 004	0.0860	0.0229	4.6000e- 004	0.0234	0.0000	65.7378	65.7378	2.8400e- 003	2.6900e- 003	66.6103
Waste			 			0.0000	0.0000		0.0000	0.0000	0.2181	0.0000	0.2181	0.0108	0.0000	0.4884
Water	N					0.0000	0.0000		0.0000	0.0000	0.0262	0.0518	0.0780	1.0000e- 004	6.0000e- 005	0.0977
Total	0.0229	0.0405	0.2722	7.1000e- 004	0.0855	5.1000e- 004	0.0860	0.0229	4.7000e- 004	0.0234	0.2443	66.8758	67.1201	0.0139	2.7700e- 003	68.2928

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/6/2023	2/17/2023	5	10	
2	Site Preparation	Site Preparation	2/18/2023	2/20/2023	5	1	
3	Grading	Grading	2/21/2023	2/22/2023	5	2	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Building Construction	Building Construction	2/23/2023	7/12/2023	5	100	
	Paving	Paving	7/13/2023	7/19/2023	5	5	
6	Architectural Coating	Architectural Coating	7/20/2023	7/26/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500; Striped Parking Area: 0

(Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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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
Demolition	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **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
Category					ton	s/yr							MT	/yr		
	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

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3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378
Total	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	-/yr		
	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

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3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378
Total	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000		1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

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3.3 Site Preparation - 2023

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					ton	s/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	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119
Total	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000		1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

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3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119
Total	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119

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					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004		3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

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3.4 Grading - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381
Total	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004	 	3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381
Total	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381

3.5 Building Construction - 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					ton	s/yr							MT	/yr		
Off-Road	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/уг		
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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Oii rioda	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160	 	0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 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					ton	s/yr							МТ	/yr		
- Oil Roda	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005	-	6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

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3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140
Total	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	Γ/yr		
- Cir rtoud	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
	0.0000		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

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3.6 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140
Total	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140

3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e- 004	3.2600e- 003	4.5300e- 003	1.0000e- 005	 	1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393
Total	0.0121	3.2600e- 003	4.5300e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e- 004	3.2600e- 003	4.5300e- 003	1.0000e- 005	 	1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393
Total	0.0121	3.2600e- 003	4.5300e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0178	0.0404	0.2721	7.1000e- 004	0.0855	5.0000e- 004	0.0860	0.0229	4.6000e- 004	0.0234	0.0000	65.7378	65.7378	2.8400e- 003	2.6900e- 003	66.6103
Unmitigated	0.0178	0.0404	0.2721	7.1000e- 004	0.0855	5.0000e- 004	0.0860	0.0229	4.6000e- 004	0.0234	0.0000	65.7378	65.7378	2.8400e- 003	2.6900e- 003	66.6103

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	1.00	1.00	1.00	226,929	226,929
Total	1.00	1.00	1.00	226,929	226,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	623.43	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT/yr						
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.9613	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Electricity Unmitigated	ri					0.0000	0.0000		0.0000	0.0000	0.0000	0.9613	0.9613	1.6000e- 004	2.0000e- 005	0.9708
NaturalGas Mitigated	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
NaturalGas Unmitigated	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Regional Shopping Center	2340	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
Total		1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Regional Shopping Center	2340	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
Total		1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Regional Shopping Center	10390	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Total		0.9613	1.6000e- 004	2.0000e- 005	0.9708

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Regional Shopping Center	10390	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Total		0.9613	1.6000e- 004	2.0000e- 005	0.9708

6.0 Area Detail

6.1 Mitigation Measures Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Mitigated	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Unmitigated	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

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					ton	s/yr							MT	/yr		
Architectural Coating	1.1600e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e- 003					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Coating	1.1600e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Duraturata	3.9100e- 003				 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

7.0 Water Detail

7.1 Mitigation Measures Water

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
ga.ea	0.0780	1.0000e- 004	6.0000e- 005	0.0977
Unmitigated	0.0780	1.0000e- 004	6.0000e- 005	0.0977

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Shopping Center	0.0740725 / 0.0453993	! !	1.0000e- 004	6.0000e- 005	0.0977
Total		0.0780	1.0000e- 004	6.0000e- 005	0.0977

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Shopping Center	0.0740725 / 0.0453993		1.0000e- 004	6.0000e- 005	0.0977
Total		0.0780	1.0000e- 004	6.0000e- 005	0.0977

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	/yr	
Mitigated	. 0.2.01	0.0108	0.0000	0.4884
Unmitigated		0.0108	0.0000	0.4884

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Regional Shopping Center	1.05	0.2181	0.0108	0.0000	0.4884
Total		0.2181	0.0108	0.0000	0.4884

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Regional Shopping Center	1.05	0.2181	0.0108	0.0000	0.4884
Total		0.2181	0.0108	0.0000	0.4884

9.0 Operational Offroad

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Facility as a set Tours	Niconale a n	Llast last /Day	Heat land Wear	Dailan Datina	Final Times
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Internal Trips ONLY 2030

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37

Climate Zone 4 Operational Year 2030

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Internal Trips VMT only

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	5.50	623.43
tblVehicleTrips	CC_TTP	64.70	100.00
tblVehicleTrips	CNW_TL	6.40	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	6.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00

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tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	46.12	1.00
tblVehicleTrips	SU_TR	21.10	1.00
tblVehicleTrips	WD_TR	37.75	1.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	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			
2023	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9291
Maximum	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9291

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT	/yr				
	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9290
Maximum	0.0499	0.3803	0.4235	6.9000e- 004	6.2300e- 003	0.0188	0.0250	2.7700e- 003	0.0174	0.0201	0.0000	60.4631	60.4631	0.0184	2.0000e- 005	60.9290

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

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-6-2023	5-5-2023	0.2242	0.2242
2	5-6-2023	8-5-2023	0.2020	0.2020
		Highest	0.2242	0.2242

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	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					ton	s/yr							МТ	/yr		
Area	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Lilorgy	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	1.0862	1.0862	1.6000e- 004	2.0000e- 005	1.0964
Mobile	0.0161	0.0337	0.2412	6.5000e- 004	0.0855	4.2000e- 004	0.0859	0.0229	3.9000e- 004	0.0233	0.0000	60.5198	60.5198	2.6600e- 003	2.4200e- 003	61.3070
Waste	 		1			0.0000	0.0000		0.0000	0.0000	0.2181	0.0000	0.2181	0.0108	0.0000	0.4884
Water	 		i i			0.0000	0.0000		0.0000	0.0000	0.0262	0.0518	0.0780	1.0000e- 004	6.0000e- 005	0.0977
Total	0.0212	0.0338	0.2413	6.5000e- 004	0.0855	4.3000e- 004	0.0859	0.0229	4.0000e- 004	0.0233	0.2443	61.6578	61.9020	0.0137	2.5000e- 003	62.9895

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	1.0862	1.0862	1.6000e- 004	2.0000e- 005	1.0964
Mobile	0.0161	0.0337	0.2412	6.5000e- 004	0.0855	4.2000e- 004	0.0859	0.0229	3.9000e- 004	0.0233	0.0000	60.5198	60.5198	2.6600e- 003	2.4200e- 003	61.3070
Waste			 			0.0000	0.0000		0.0000	0.0000	0.2181	0.0000	0.2181	0.0108	0.0000	0.4884
Water						0.0000	0.0000		0.0000	0.0000	0.0262	0.0518	0.0780	1.0000e- 004	6.0000e- 005	0.0977
Total	0.0212	0.0338	0.2413	6.5000e- 004	0.0855	4.3000e- 004	0.0859	0.0229	4.0000e- 004	0.0233	0.2443	61.6578	61.9020	0.0137	2.5000e- 003	62.9895

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/6/2023	2/17/2023	5	10	
2	Site Preparation	Site Preparation	2/18/2023	2/20/2023	5	1	
3	Grading	Grading	2/21/2023	2/22/2023	5	2	

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4	Building Construction	Building Construction	2/23/2023	7/12/2023	5	100	
	Paving	Paving	7/13/2023	7/19/2023	5	5	
6	Architectural Coating	Architectural Coating	7/20/2023	7/26/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500; Striped Parking Area: 0

(Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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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
Demolition	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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
Category					ton	s/yr							MT	/yr		
1	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

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3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378
Total	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378

Mitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	-/yr		
	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328
Total	3.2300e- 003	0.0289	0.0370	6.0000e- 005		1.4100e- 003	1.4100e- 003		1.3500e- 003	1.3500e- 003	0.0000	5.2091	5.2091	9.5000e- 004	0.0000	5.2328

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3.2 **Demolition - 2023**

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378
Total	1.3000e- 004	9.0000e- 005	9.8000e- 004	0.0000	3.1000e- 004	0.0000	3.1000e- 004	8.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2351	0.2351	1.0000e- 005	1.0000e- 005	0.2378

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000		1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

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3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119
Total	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					2.7000e- 004	0.0000	2.7000e- 004	3.0000e- 005	0.0000	3.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	 	1.1000e- 004	1.1000e- 004		1.0000e- 004	1.0000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309
Total	2.7000e- 004	3.0900e- 003	1.9600e- 003	0.0000	2.7000e- 004	1.1000e- 004	3.8000e- 004	3.0000e- 005	1.0000e- 004	1.3000e- 004	0.0000	0.4275	0.4275	1.4000e- 004	0.0000	0.4309

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3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	СО	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					ton	s/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	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119
Total	1.0000e- 005	0.0000	5.0000e- 005	0.0000	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0118	0.0118	0.0000	0.0000	0.0119

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Fugitive Dust					5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1 .	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004	 	3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

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3.4 Grading - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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
1 .	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381
Total	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust			i i i		5.3100e- 003	0.0000	5.3100e- 003	2.5700e- 003	0.0000	2.5700e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005		4.2000e- 004	4.2000e- 004	1 1 1	3.9000e- 004	3.9000e- 004	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481
Total	9.3000e- 004	0.0102	5.5500e- 003	1.0000e- 005	5.3100e- 003	4.2000e- 004	5.7300e- 003	2.5700e- 003	3.9000e- 004	2.9600e- 003	0.0000	1.2381	1.2381	4.0000e- 004	0.0000	1.2481

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/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	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381
Total	2.0000e- 005	1.0000e- 005	1.6000e- 004	0.0000	5.0000e- 005	0.0000	5.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0376	0.0376	0.0000	0.0000	0.0381

3.5 Building Construction - 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					ton	s/yr							MT	/yr		
Off-Road	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							МТ	/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160	1 1	0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093
Total	0.0316	0.3209	0.3549	5.7000e- 004		0.0160	0.0160		0.0147	0.0147	0.0000	50.1042	50.1042	0.0162	0.0000	50.5093

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 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					ton	s/yr							MT	/yr		
Oii Nodu	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

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3.6 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/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	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140
Total	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	√yr		
- Cir rtoud	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669
	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.5300e- 003	0.0138	0.0176	3.0000e- 005		6.6000e- 004	6.6000e- 004		6.2000e- 004	6.2000e- 004	0.0000	2.3498	2.3498	6.8000e- 004	0.0000	2.3669

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3.6 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	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					ton	s/yr							MT	/уг		
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	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140
Total	1.2000e- 004	8.0000e- 005	8.8000e- 004	0.0000	2.8000e- 004	0.0000	2.8000e- 004	7.0000e- 005	0.0000	8.0000e- 005	0.0000	0.2116	0.2116	1.0000e- 005	1.0000e- 005	0.2140

3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	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					ton	s/yr							MT	/yr		
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e- 004	3.2600e- 003	4.5300e- 003	1.0000e- 005	 	1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393
Total	0.0121	3.2600e- 003	4.5300e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393

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3.7 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	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					ton	s/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e- 004	3.2600e- 003	4.5300e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393
Total	0.0121	3.2600e- 003	4.5300e- 003	1.0000e- 005		1.8000e- 004	1.8000e- 004		1.8000e- 004	1.8000e- 004	0.0000	0.6383	0.6383	4.0000e- 005	0.0000	0.6393

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3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Mitigated	0.0161	0.0337	0.2412	6.5000e- 004	0.0855	4.2000e- 004	0.0859	0.0229	3.9000e- 004	0.0233	0.0000	60.5198	60.5198	2.6600e- 003	2.4200e- 003	61.3070
Unmitigated	0.0161	0.0337	0.2412	6.5000e- 004	0.0855	4.2000e- 004	0.0859	0.0229	3.9000e- 004	0.0233	0.0000	60.5198	60.5198	2.6600e- 003	2.4200e- 003	61.3070

4.2 Trip Summary Information

	Aver	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	1.00	1.00	1.00	226,929	226,929
Total	1.00	1.00	1.00	226,929	226,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	623.43	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.514923	0.057522	0.206064	0.138974	0.023636	0.006062	0.011219	0.006223	0.000940	0.000535	0.027699	0.003185	0.003017

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.9613	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Electricity Unmitigated	 					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.9613	0.9613	1.6000e- 004	2.0000e- 005	0.9708
NaturalGas Mitigated	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
NaturalGas Unmitigated	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005	 	1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Regional Shopping Center	2340	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
Total		1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

Mitigated

	NaturalGa s 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					ton	s/yr							MT	-/yr		
Regional Shopping Center	2340	1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256
Total		1.0000e- 005	1.1000e- 004	1.0000e- 004	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.1249	0.1249	0.0000	0.0000	0.1256

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5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Regional Shopping Center	10390	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Total		0.9613	1.6000e- 004	2.0000e- 005	0.9708

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Regional Shopping Center	10390	0.9613	1.6000e- 004	2.0000e- 005	0.9708
Total		0.9613	1.6000e- 004	2.0000e- 005	0.9708

6.0 Area Detail

6.1 Mitigation Measures Area

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	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					ton	s/yr							MT	/yr		
Mitigated	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Unmitigated	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

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					ton	s/yr							MT	/yr		
Oti	1.1600e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Donation 1	3.9100e- 003					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000	 	0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	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					ton	s/yr							MT	/yr		
Coating	1.1600e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Products	3.9100e- 003		i i		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000	 	0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	5.0700e- 003	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category		MT	/yr	
		1.0000e- 004	6.0000e- 005	0.0977
Unmitigated	0.0780	1.0000e- 004	6.0000e- 005	0.0977

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Shopping Center	0.0740725 / 0.0453993	! !	1.0000e- 004	6.0000e- 005	0.0977
Total		0.0780	1.0000e- 004	6.0000e- 005	0.0977

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7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	/yr	
Shopping Center	0.0740725 / 0.0453993		1.0000e- 004	6.0000e- 005	0.0977
Total		0.0780	1.0000e- 004	6.0000e- 005	0.0977

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT	-/yr	
Mitigated	. 0.2.01	0.0108	0.0000	0.4884
	0.2181	0.0108	0.0000	0.4884

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	/yr	
Regional Shopping Center	1.05	0.2101	0.0108	0.0000	0.4884
Total		0.2181	0.0108	0.0000	0.4884

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Regional Shopping Center	1.05	0.2181	0.0108	0.0000	0.4884			
Total		0.2181	0.0108	0.0000	0.4884			

9.0 Operational Offroad

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

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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Internal Trips ONLY

Santa Barbara-North of Santa Ynez County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37

Climate Zone 4 Operational Year 2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Internal Trips VMT only

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	5.50	623.43
tblVehicleTrips	CC_TTP	64.70	100.00
tblVehicleTrips	CNW_TL	6.40	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	6.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	46.12	1.00
tblVehicleTrips	SU_TR	21.10	1.00
tblVehicleTrips	WD_TR	37.75	1.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
	4.8267	10.1921	7.5854	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,407.059 7	1,407.059 7	0.4429	3.0100e- 003	1,418.531 8
Maximum	4.8267	10.1921	7.5854	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,407.059 7	1,407.059 7	0.4429	3.0100e- 003	1,418.531 8

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	4.8267	10.1921	7.5854	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,407.059 7	1,407.059 7	0.4429	3.0100e- 003	1,418.531 8
Maximum	4.8267	10.1921	7.5854	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,407.059 7	1,407.059 7	0.4429	3.0100e- 003	1,418.531 8

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		lb/day											lb/d	day		
Area	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Energy	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Mobile	0.0950	0.2068	1.4686	3.9700e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		404.6479	404.6479	0.0169	0.0156	409.7303
Total	0.1228	0.2074	1.4692	3.9700e- 003	0.4803	2.7700e- 003	0.4831	0.1284	2.6000e- 003	0.1310		405.4024	405.4024	0.0169	0.0157	410.4892

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Energy	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Mobile	0.0950	0.2068	1.4686	3.9700e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		404.6479	404.6479	0.0169	0.0156	409.7303
Total	0.1228	0.2074	1.4692	3.9700e- 003	0.4803	2.7700e- 003	0.4831	0.1284	2.6000e- 003	0.1310		405.4024	405.4024	0.0169	0.0157	410.4892

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/6/2023	2/17/2023	5	10	
2	Site Preparation	Site Preparation	2/18/2023	2/20/2023	5	1	
3	Grading	Grading	2/21/2023	2/22/2023	5	2	
4	Building Construction	Building Construction	2/23/2023	7/12/2023	5	100	
5	Paving	Paving	7/13/2023	7/19/2023	5	5	
6	Architectural Coating	Architectural Coating	7/20/2023	7/26/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500; Striped Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821	1 1 1	0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0254	0.0165	0.1927	5.2000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		52.8605	52.8605	1.9000e- 003	1.6700e- 003	53.4070
Total	0.0254	0.0165	0.1927	5.2000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		52.8605	52.8605	1.9000e- 003	1.6700e- 003	53.4070

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0254	0.0165	0.1927	5.2000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		52.8605	52.8605	1.9000e- 003	1.6700e- 003	53.4070
Total	0.0254	0.0165	0.1927	5.2000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		52.8605	52.8605	1.9000e- 003	1.6700e- 003	53.4070

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3.3 Site Preparation - 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					lb/d	day							lb/d	day		
Fugitive Dust	 				0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0127	8.2600e- 003	0.0964	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		26.4302	26.4302	9.5000e- 004	8.4000e- 004	26.7035
Total	0.0127	8.2600e- 003	0.0964	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		26.4302	26.4302	9.5000e- 004	8.4000e- 004	26.7035

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3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048	 	950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0127	8.2600e- 003	0.0964	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		26.4302	26.4302	9.5000e- 004	8.4000e- 004	26.7035
Total	0.0127	8.2600e- 003	0.0964	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		26.4302	26.4302	9.5000e- 004	8.4000e- 004	26.7035

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3.4 Grading - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.771 3	1,364.771 3	0.4414		1,375.806 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0203	0.0132	0.1542	4.2000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		42.2884	42.2884	1.5200e- 003	1.3400e- 003	42.7256
Total	0.0203	0.0132	0.1542	4.2000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		42.2884	42.2884	1.5200e- 003	1.3400e- 003	42.7256

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.771 3	1,364.771 3	0.4414	 	1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	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
Worker	0.0203	0.0132	0.1542	4.2000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		42.2884	42.2884	1.5200e- 003	1.3400e- 003	42.7256
Total	0.0203	0.0132	0.1542	4.2000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		42.2884	42.2884	1.5200e- 003	1.3400e- 003	42.7256

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0457	0.0297	0.3469	9.4000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		95.1488	95.1488	3.4200e- 003	3.0100e- 003	96.1326
Total	0.0457	0.0297	0.3469	9.4000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		95.1488	95.1488	3.4200e- 003	3.0100e- 003	96.1326

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000	 				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0457	0.0297	0.3469	9.4000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		95.1488	95.1488	3.4200e- 003	3.0100e- 003	96.1326
Total	0.0457	0.0297	0.3469	9.4000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		95.1488	95.1488	3.4200e- 003	3.0100e- 003	96.1326

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168	 	281.8690
Total	4.8267	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.8267	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.0950	0.2068	1.4686	3.9700e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		404.6479	404.6479	0.0169	0.0156	409.7303
Unmitigated	0.0950	0.2068	1.4686	3.9700e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		404.6479	404.6479	0.0169	0.0156	409.7303

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	1.00	1.00	1.00	226,929	226,929
Total	1.00	1.00	1.00	226,929	226,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	623.43	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
NaturalGas Unmitigated	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Regional Shopping Center	6.41096	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Total		7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Regional Shopping Center	0.0064109 6	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Total		7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000	 	2.3000e- 004
Unmitigated	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
SubCategory		lb/day											lb/day					
Coating	6.3500e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
	0.0214		i i		 	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000		
Landocaping	1.0000e- 005	0.0000	1.0000e- 004	0.0000	 	0.0000	0.0000	 	0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004		
Total	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004		

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory													lb/c	lay		
7 il Chile Citaran	6.3500e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0214					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.00000	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Total	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Internal Trips ONLY

Santa Barbara-North of Santa Ynez County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Regional Shopping Center	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)3.1Precipitation Freq (Days)37

Climate Zone 4 Operational Year 2027

Utility Company Pacific Gas and Electric Company

 CO2 Intensity
 203.98
 CH4 Intensity
 0.033
 N20 Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - Internal Trips VMT only

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	5.50	623.43
tblVehicleTrips	CC_TTP	64.70	100.00
tblVehicleTrips	CNW_TL	6.40	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	6.60	0.00
tblVehicleTrips	CW_TTP	16.30	0.00
tblVehicleTrips	DV_TP	35.00	0.00

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	54.00	100.00
tblVehicleTrips	ST_TR	46.12	1.00
tblVehicleTrips	SU_TR	21.10	1.00
tblVehicleTrips	WD_TR	37.75	1.00

2.0 Emissions Summary

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023	4.8267	10.1940	7.5932	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,406.198 1	1,406.198 1	0.4431	3.3000e- 003	1,417.712 1
Maximum	4.8267	10.1940	7.5932	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,406.198 1	1,406.198 1	0.4431	3.3000e- 003	1,417.712 1

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2023		10.1940	7.5932	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,406.198 1	1,406.198 1	0.4431	3.3000e- 003	1,417.712 1
Maximum	4.8267	10.1940	7.5932	0.0145	5.3625	0.4203	5.7828	2.5820	0.3867	2.9687	0.0000	1,406.198 1	1,406.198 1	0.4431	3.3000e- 003	1,417.712 1

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

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Area	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Energy	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Mobile	0.0997	0.2217	1.5313	3.9100e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		398.3104	398.3104	0.0174	0.0164	403.6162
Total	0.1275	0.2223	1.5320	3.9100e- 003	0.4803	2.7700e- 003	0.4831	0.1284	2.6000e- 003	0.1310		399.0648	399.0648	0.0174	0.0164	404.3751

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Energy	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Mobile	0.0997	0.2217	1.5313	3.9100e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		398.3104	398.3104	0.0174	0.0164	403.6162
Total	0.1275	0.2223	1.5320	3.9100e- 003	0.4803	2.7700e- 003	0.4831	0.1284	2.6000e- 003	0.1310		399.0648	399.0648	0.0174	0.0164	404.3751

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/6/2023	2/17/2023	5	10	
2	Site Preparation	Site Preparation	2/18/2023	2/20/2023	5	1	
3	Grading	Grading	2/21/2023	2/22/2023	5	2	
4	Building Construction	Building Construction	2/23/2023	7/12/2023	5	100	
5	Paving	Paving	7/13/2023	7/19/2023	5	5	
6	Architectural Coating	Architectural Coating	7/20/2023	7/26/2023	5	5	

Acres of Grading (Site Preparation Phase): 0.5

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Demolition	4	10.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	8.30	6.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.405 5	1,148.405 5	0.2089		1,153.629 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0276	0.0189	0.2006	5.1000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		51.7834	51.7834	2.1000e- 003	1.8300e- 003	52.3823
Total	0.0276	0.0189	0.2006	5.1000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		51.7834	51.7834	2.1000e- 003	1.8300e- 003	52.3823

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821	1 1 1	0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0
Total	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.405 5	1,148.405 5	0.2089		1,153.629 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0276	0.0189	0.2006	5.1000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		51.7834	51.7834	2.1000e- 003	1.8300e- 003	52.3823
Total	0.0276	0.0189	0.2006	5.1000e- 004	0.0632	3.1000e- 004	0.0635	0.0168	2.8000e- 004	0.0170		51.7834	51.7834	2.1000e- 003	1.8300e- 003	52.3823

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day				lb/d	day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048	 	950.0517
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	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	
Worker	0.0138	9.4400e- 003	0.1003	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		25.8917	25.8917	1.0500e- 003	9.2000e- 004	26.1912	
Total	0.0138	9.4400e- 003	0.1003	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		25.8917	25.8917	1.0500e- 003	9.2000e- 004	26.1912	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000			
Off-Road	0.5348	6.1887	3.9239	9.7300e- 003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048	 	950.0517			
Total	0.5348	6.1887	3.9239	9.7300e- 003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657	0.0000	942.4317	942.4317	0.3048		950.0517			

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category	lb/day										lb/day							
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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		
Worker	0.0138	9.4400e- 003	0.1003	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		25.8917	25.8917	1.0500e- 003	9.2000e- 004	26.1912		
Total	0.0138	9.4400e- 003	0.1003	2.6000e- 004	0.0316	1.5000e- 004	0.0317	8.3800e- 003	1.4000e- 004	8.5200e- 003		25.8917	25.8917	1.0500e- 003	9.2000e- 004	26.1912		

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category	lb/day											lb/day							
Fugitive Dust					5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000			
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.771 3	1,364.771 3	0.4414		1,375.806 2			
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550		1,364.771 3	1,364.771 3	0.4414		1,375.806 2			

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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	
Worker	0.0221	0.0151	0.1605	4.1000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		41.4267	41.4267	1.6800e- 003	1.4700e- 003	41.9059	
Total	0.0221	0.0151	0.1605	4.1000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		41.4267	41.4267	1.6800e- 003	1.4700e- 003	41.9059	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	11 11				5.3119	0.0000	5.3119	2.5686	0.0000	2.5686			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141	 	0.4201	0.4201		0.3865	0.3865	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2
Total	0.9335	10.1789	5.5516	0.0141	5.3119	0.4201	5.7320	2.5686	0.3865	2.9550	0.0000	1,364.771 3	1,364.771 3	0.4414		1,375.806 2

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0221	0.0151	0.1605	4.1000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		41.4267	41.4267	1.6800e- 003	1.4700e- 003	41.9059
Total	0.0221	0.0151	0.1605	4.1000e- 004	0.0505	2.5000e- 004	0.0508	0.0134	2.3000e- 004	0.0136		41.4267	41.4267	1.6800e- 003	1.4700e- 003	41.9059

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.608 9	1,104.608 9	0.3573		1,113.540 2

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203	1 1 1	0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2
Total	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.608 9	1,104.608 9	0.3573		1,113.540 2

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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3.6 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.087 8	1,036.087 8	0.3018		1,043.633 1

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	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
Worker	0.0497	0.0340	0.3611	9.2000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		93.2101	93.2101	3.7900e- 003	3.3000e- 003	94.2882
Total	0.0497	0.0340	0.3611	9.2000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		93.2101	93.2101	3.7900e- 003	3.3000e- 003	94.2882

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.087 8	1,036.087 8	0.3018		1,043.633 1

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0497	0.0340	0.3611	9.2000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		93.2101	93.2101	3.7900e- 003	3.3000e- 003	94.2882
Total	0.0497	0.0340	0.3611	9.2000e- 004	0.1137	5.5000e- 004	0.1142	0.0302	5.1000e- 004	0.0307		93.2101	93.2101	3.7900e- 003	3.3000e- 003	94.2882

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	4.8267	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023 Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	4.6350					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	4.8267	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
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	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.0997	0.2217	1.5313	3.9100e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		398.3104	398.3104	0.0174	0.0164	403.6162
Unmitigated	0.0997	0.2217	1.5313	3.9100e- 003	0.4803	2.7200e- 003	0.4830	0.1284	2.5500e- 003	0.1309		398.3104	398.3104	0.0174	0.0164	403.6162

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Regional Shopping Center	1.00	1.00	1.00	226,929	226,929
Total	1.00	1.00	1.00	226,929	226,929

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Regional Shopping Center	0.00	623.43	0.00	0.00	100.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Regional Shopping Center	0.506430	0.055863	0.206798	0.143793	0.025842	0.006469	0.011207	0.006259	0.000953	0.000560	0.028990	0.003362	0.003474

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
NaturalGas Mitigated	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
NaturalGas Unmitigated	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Regional Shopping Center	6.41096	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Total		7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
Regional Shopping Center	0.0064109 6	7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587
Total		7.0000e- 005	6.3000e- 004	5.3000e- 004	0.0000		5.0000e- 005	5.0000e- 005		5.0000e- 005	5.0000e- 005		0.7542	0.7542	1.0000e- 005	1.0000e- 005	0.7587

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Unmitigated	0.0278	0.0000	1.0000e- 004	0.0000	1 1 1	0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000	1 1 1	2.3000e- 004

Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Coating	6.3500e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0214		1 1 1		,	0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
' · ·	1.0000e- 005	0.0000	1.0000e- 004	0.0000	1 	0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Total	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Coating	6.3500e- 003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.0214		 			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landocaping	1.0000e- 005	0.0000	1.0000e- 004	0.0000	 	0.0000	0.0000	 	0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004
Total	0.0278	0.0000	1.0000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e- 004	2.2000e- 004	0.0000		2.3000e- 004

7.0 Water Detail

7.1 Mitigation Measures Water

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Internal Trips ONLY - Santa Barbara-North of Santa Ynez County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation



Emission Modeling
Project Calculations in Support of Response to Comments (19% internal and
Current ITE Pass-By Factors) VMT with Transit and Pedestrian Adjustments

Richards Ranch Transit Reductions (2027) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Richards Ranch Transit Reductions (2027)
Operational Year	2027
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	26.2
Location	34.890304535579375, -120.34580509651883
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3377
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
Single Family Housing	1.00	Dwelling Unit	0.32	0.10	0.00	_	3.00	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.09	0.07	0.21	1.68	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	516	516	0.06	0.02	1.87	525
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.09	0.07	0.22	1.57	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	508	508	0.06	0.02	0.05	516
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.09	0.07	0.22	1.59	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	0.48	508	509	0.06	0.02	0.81	517
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.02	0.01	0.04	0.29	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	0.08	84.2	84.2	0.01	< 0.005	0.13	85.6

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		

Mobile	0.08	0.06	0.20	1.62	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	500	500	0.01	0.02	1.87	507
Area	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.15	0.15	< 0.005	< 0.005	_	0.15
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.09	0.07	0.21	1.68	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	516	516	0.06	0.02	1.87	525
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.09	0.07	0.21	1.57	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	491	491	0.01	0.02	0.05	498
Area	0.00	< 0.005	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.09	0.07	0.22	1.57	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	508	508	0.06	0.02	0.05	516
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.09	0.07	0.21	1.56	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	_	492	492	0.01	0.02	0.81	499
Area	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.07	0.07	< 0.005	< 0.005	_	0.08
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.09	0.07	0.22	1.59	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	0.48	508	509	0.06	0.02	0.81	517
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.02	0.01	0.04	0.28	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	_	81.4	81.4	< 0.005	< 0.005	0.13	82.6
Area	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.01	0.01	< 0.005	< 0.005	_	0.01

Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	2.68	2.68	< 0.005	< 0.005	_	2.69
Water	_	_	_	_	_	_	<u> </u>	_	_	_	_	0.01	0.02	0.03	< 0.005	< 0.005	_	0.04
Waste	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.02	0.01	0.04	0.29	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	0.08	84.2	84.2	0.01	< 0.005	0.13	85.6

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

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42
Total	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42

Total	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56	< 0.005	< 0.005	_	0.57
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56	< 0.005	< 0.005	_	0.57

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.12	2.12	< 0.005	< 0.005	_	2.12
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.12	2.12	< 0.005	< 0.005	_	2.12

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	co	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	-	-	-	_	_	_	_	_	_	_	_	_	-	-	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.15	0.15	< 0.005	< 0.005	_	0.15
Total	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.15	0.15	< 0.005	< 0.005	_	0.15
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	0.00	< 0.005	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.01	0.01	< 0.005	< 0.005	_	0.01
Total	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.01	0.01	< 0.005	< 0.005	_	0.01

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land	TOG	ROG	NOx	со	SO2	PM10E		PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		
Daily, Summer (Max)	_	_	_		_	_	_			_		_	_	_	_		_	
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Total	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Total	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.01	0.02	0.03	< 0.005	< 0.005	_	0.04
Total	_		_	_			_	_	_		_	0.01	0.02	0.03	< 0.005	< 0.005	_	0.04

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)

			_	J, J		,	· ·		J,	.,								
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Total	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Total	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23
Total	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23

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)

J			ay ioi a	any, (011/	, i i o i a i i	iddi) dild	000	io, aay io	. aan, ,	11/91 101	aimaaij							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	< 0.005	< 0.005
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	-	_	_	-	-	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	-	-	-	_	-	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	-	-	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipme	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
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)

				<i>J</i> ,					<u>, , , , , , , , , , , , , , , , , , , </u>									
Equipme nt Type	TOG	ROG	NOx	СО	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)

Ontona																		
Equipme nt Type	TOG	ROG	NOx	СО	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

Vegetatio n	TOG	ROG		со	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	_	_	_	_	_	_	_	 _	_	_	_	_	 _	_	 _
iotai															

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

		(1107 0101						orday ioi										
Species	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00	0.00	0.00	0.00	659	659	659	240,643

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
0.2025	0.07	0.00	0.00	_

5.10.3. Landscape Equipment

Season	Unit	Value

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	6,063	204	0.0330	0.0040	39,900

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	35,133	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	0.75	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

	_						
and the second s			The same of the sa				I
Land Lea Type	L Equipment Type	I Dofrigorant		1 Quantity (kg)	I Operations Look Pate	I Sorvico Look Dato	Times Serviced
Land USE Type	Equipitient Type	Remuerant	JOWE	Qualitity (Ng)	TOperations Leak Nate	JOHNICE LEAK MAIL	I IIIIes Sei viceu
Land Use Type	Equipment Type	Refrigerant	IGWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
_ darbo.u .)bo	/ 60	g	rambor por Day			

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Equipinient Type	li nei iybe	Inditibel pel Day	Illouis per Day	riburs per real	li ioisebowei	Luau i aciui

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
1.1	71		J 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 7 /

5.17. User Defined

Equipment Type Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type Vegetation Soil Type Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
21		

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
nee type	ramoci	Liceticity Gavea (KVVIII)	Natural Gas Gavea (Staryear)

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	5.44	annual days of extreme heat
Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	_	meters of inundation depth
Wildfire	44.1	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, 1.41 meters

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores 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	11.7
AQ-PM	8.00
AQ-DPM	8.70
Drinking Water	64.8
Lead Risk Housing	12.1
Pesticides	97.3
Toxic Releases	9.03
Traffic	9.21
Effect Indicators	_
CleanUp Sites	83.9
Groundwater	100
Haz Waste Facilities/Generators	96.5
Impaired Water Bodies	99.2
Solid Waste	83.5
Sensitive Population	_
Asthma	48.0
Cardio-vascular	15.8

Low Birth Weights	49.0
Socioeconomic Factor Indicators	_
Education	63.0
Housing	5.01
Linguistic	45.4
Poverty	28.6
Unemployment	26.9

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	61.45258565
Employed	61.79905043
Median HI	72.86025921
Education	_
Bachelor's or higher	63.26190171
High school enrollment	17.87501604
Preschool enrollment	28.78224047
Transportation	_
Auto Access	70.20402926
Active commuting	84.53740536
Social	_
2-parent households	98.29334018
Voting	97.60041062
Neighborhood	_
Alcohol availability	93.08353651

Park access	5.646092647
Retail density	1.065058386
Supermarket access	18.22148082
Tree canopy	80.45682022
Housing	_
Homeownership	79.5970743
Housing habitability	80.75195688
Low-inc homeowner severe housing cost burden	44.56563583
Low-inc renter severe housing cost burden	90.87642756
Uncrowded housing	62.10701912
Health Outcomes	_
Insured adults	38.59874246
Arthritis	0.0
Asthma ER Admissions	56.5
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	44.8
Cognitively Disabled	52.2
Physically Disabled	27.7
Heart Attack ER Admissions	79.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0

Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	3.6
SLR Inundation Area	0.0
Children	87.0
Elderly	8.4
English Speaking	73.6
Foreign-born	32.0
Outdoor Workers	3.7
Climate Change Adaptive Capacity	_
Impervious Surface Cover	96.3
Traffic Density	8.8
Traffic Access	0.0
Other Indices	_
Hardship	31.5
Other Decision Support	_
2016 Voting	88.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	43.0

Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	
Operations: Vehicle Data	

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.

Richards Ranch Transit Reductions (2030) Detailed Report

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 - 4.6.1. Unmitigated
- 4.7. Offroad Emissions By Equipment Type
 - 4.7.1. Unmitigated
- 4.8. Stationary Emissions By Equipment Type
 - 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
 - 4.9.1. Unmitigated
- 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
 - 5.9. Operational Mobile Sources
 - 5.9.1. Unmitigated
 - 5.10. Operational Area Sources
 - 5.10.1. Hearths
 - 5.10.1.1. Unmitigated
 - 5.10.2. Architectural Coatings
 - 5.10.3. Landscape Equipment
 - 5.11. Operational Energy Consumption
 - 5.11.1. Unmitigated
 - 5.12. Operational Water and Wastewater Consumption
 - 5.12.1. Unmitigated
 - 5.13. Operational Waste Generation
 - 5.13.1. Unmitigated
 - 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
 - 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

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Richards Ranch Transit Reductions (2030)
Operational Year	2030
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	26.2
Location	34.890304535579375, -120.34580509651883
County	Santa Barbara
City	Unincorporated
Air District	Santa Barbara County APCD
Air Basin	South Central Coast
TAZ	3377
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Southern California Gas
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)		Special Landscape Area (sq ft)	Population	Description
Single Family Housing	1.00	Dwelling Unit	0.32	0.10	0.00	_	3.00	_

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.08	0.06	0.17	1.48	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	487	487	0.05	0.02	1.36	495
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.08	0.06	0.18	1.38	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	479	480	0.05	0.02	0.04	486
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.08	0.06	0.18	1.40	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	0.48	480	480	0.05	0.02	0.59	487
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.01	0.01	0.03	0.26	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	0.08	79.4	79.5	0.01	< 0.005	0.10	80.7

2.5. Operations Emissions by Sector, Unmitigated

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		

Mobile	0.07	0.06	0.16	1.42	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	471	471	0.01	0.02	1.36	477
Area	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.15	0.15	< 0.005	< 0.005	_	0.15
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.08	0.06	0.17	1.48	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	487	487	0.05	0.02	1.36	495
Daily, Winter (Max)	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.07	0.06	0.17	1.37	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	_	463	463	0.01	0.02	0.04	468
Area	0.00	< 0.005	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.08	0.06	0.18	1.38	< 0.005	< 0.005	0.47	0.47	< 0.005	0.12	0.12	0.48	479	480	0.05	0.02	0.04	486
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.07	0.06	0.17	1.37	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	_	463	463	0.01	0.02	0.59	469
Area	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.07	0.07	< 0.005	< 0.005	_	0.08
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	16.2	16.2	< 0.005	< 0.005	_	16.2
Water	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Waste	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.08	0.06	0.18	1.40	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	0.48	480	480	0.05	0.02	0.59	487
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.01	0.01	0.03	0.25	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	_	76.7	76.7	< 0.005	< 0.005	0.10	77.7
Area	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.01	0.01	< 0.005	< 0.005	_	0.01

Energy	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.68	2.68	< 0.005	< 0.005	_	2.69
Water	_	_	_	_	_	_	_	_	<u> </u>	_	_	0.01	0.02	0.03	< 0.005	< 0.005	<u> </u>	0.04
Waste	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	0.01	0.01	0.03	0.26	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	0.08	79.4	79.5	0.01	< 0.005	0.10	80.7

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

				iy, torii yr								D000	NDOOG	ОООТ	0114	NOO	_	000
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.51	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42
Total	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005		3.42
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42

Total	_	_	_	-	_	_	_	_	_	_	_	_	3.39	3.39	< 0.005	< 0.005	_	3.42
Annual	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56	< 0.005	< 0.005	_	0.57
Total	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56	< 0.005	< 0.005	_	0.57

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	12.8	12.8	< 0.005	< 0.005	_	12.8
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.12	2.12	< 0.005	< 0.005	_	2.12
Total	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.12	2.12	< 0.005	< 0.005	_	2.12

4.3. Area Emissions by Source

4.3.1. Unmitigated

Source	TOG	ROG	NOx	co	SO2	PM10E	PM10D	PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	-	-	-	_	_	_	_	_	_	_	_	_	-	-	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.15	0.15	< 0.005	< 0.005	_	0.15
Total	0.01	< 0.005	< 0.005	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.15	0.15	< 0.005	< 0.005	_	0.15
Daily, Winter (Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	0.00	< 0.005	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	_	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00

Consum er Products	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	< 0.005	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.01	0.01	< 0.005	< 0.005	_	0.01
Total	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	0.00	0.01	0.01	< 0.005	< 0.005	_	0.01

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Total	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Total	_	_	_	_	_	_	_	_	_	_	_	0.08	0.11	0.18	< 0.005	< 0.005	_	0.24
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.01	0.02	0.03	< 0.005	< 0.005	_	0.04
Total	_		_	_			_	_	_		_	0.01	0.02	0.03	< 0.005	< 0.005	_	0.04

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)

		(J,		,	,		· J /	. ,			_					_
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Total	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Total	_	_	_	_	_	_	_	_	_	_	_	0.41	0.00	0.41	0.04	0.00	_	1.42
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23
Total	_	_	_	_	_	_	_	_	_	_	_	0.07	0.00	0.07	0.01	0.00	_	0.23

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)

oritoria	Onata	ito (ib/ac	ty for dai	iy, toii/yi	ioi aiiii	uai) and	01100 (1	Drady 101	daily, iv	117 y 1 101	ariiridaij							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	< 0.005	< 0.005
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Single Family Housing	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	< 0.005	< 0.005

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Equipme	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	<u> </u>	_	_	_	_	_
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)

Equipme nt Type	TOG	ROG	NOx	СО	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)

Equipme nt Type	TOG	ROG	NOx	СО	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

Vegetatio n	TOG	ROG		со	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	_	_	_	_	_	_	_	 _	_	_	_	_	 _	_	_	_
iotai																

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	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG		СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Subtotal	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Paily																			
Daily, Winterwork Winterwork Windex Remove Graph	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Winder (Max) Image: Control of Max (Max) Image: Contro	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	Winter	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ered Image: Company of the	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
d	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual — — — — — — — — — — — — — — — — — — —		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Annual — — — — — — — — — — — — — — — — — — —	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided — — — — — — — — — — — — — — — — — —		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal —<	Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered — <t< td=""><td>Avoided</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td><td>_</td></t<>	Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
ered	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d —<	Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
d Subtotal — — — — — — — — — — — — — — — — — — —	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

	_and Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
-	Total all Land Uses	0.00	0.00	0.00	0.00	659	659	659	240,643

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	_
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	1
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
0.2025	0.07	0.00	0.00	_

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	6,063	204	0.0330	0.0040	39,900

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	35,133	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	0.75	_

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

and the second s			The same of the sa				I
Land Lea Typa	I Equipment Type	I Dofrigorant		1 Quantity (kg)	I Operations Look Pate	I Sarvica Look Data	Times Serviced
Land USE Type	Equipment Type	The ingerant	JOWE	Qualitity (Ng)	TOperations Leak Nate	JOHNUE LEAK MAIE	I IIIIes Sei viceu
Land Use Type	Equipment Type	Refrigerant	IGWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

3 , 3	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
_ darbo.u .)bo	/ 60	g	rambo. por Day			

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Equipinent type	li nei iybe	Inditibel pel Day	Illouis per Day	riburs per real	li ioraebowei	Luau i aciui

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type Vegetation Soil Type Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
21		

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
nee type	ramoci	Liceticity Gavea (kwii)	Natural Gas Gavea (Staryear)

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	5.44	annual days of extreme heat
Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	_	meters of inundation depth
Wildfire	44.1	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, 1.41 meters

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores 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	11.7
AQ-PM	8.00
AQ-DPM	8.70
Drinking Water	64.8
Lead Risk Housing	12.1
Pesticides	97.3
Toxic Releases	9.03
Traffic	9.21
Effect Indicators	_
CleanUp Sites	83.9
Groundwater	100
Haz Waste Facilities/Generators	96.5
Impaired Water Bodies	99.2
Solid Waste	83.5
Sensitive Population	_
Asthma	48.0
Cardio-vascular	15.8

Low Birth Weights	49.0
Socioeconomic Factor Indicators	_
Education	63.0
Housing	5.01
Linguistic	45.4
Poverty	28.6
Unemployment	26.9

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	61.45258565
Employed	61.79905043
Median HI	72.86025921
Education	
Bachelor's or higher	63.26190171
High school enrollment	17.87501604
Preschool enrollment	28.78224047
Transportation	_
Auto Access	70.20402926
Active commuting	84.53740536
Social	_
2-parent households	98.29334018
Voting	97.60041062
Neighborhood	_
Alcohol availability	93.08353651

	T 0 400000 47
Park access	5.646092647
Retail density	1.065058386
Supermarket access	18.22148082
Tree canopy	80.45682022
Housing	_
Homeownership	79.5970743
Housing habitability	80.75195688
Low-inc homeowner severe housing cost burden	44.56563583
Low-inc renter severe housing cost burden	90.87642756
Uncrowded housing	62.10701912
Health Outcomes	_
Insured adults	38.59874246
Arthritis	0.0
Asthma ER Admissions	56.5
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	44.8
Cognitively Disabled	52.2
Physically Disabled	27.7
Heart Attack ER Admissions	79.8
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0

Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	3.6
SLR Inundation Area	0.0
Children	87.0
Elderly	8.4
English Speaking	73.6
Foreign-born	32.0
Outdoor Workers	3.7
Climate Change Adaptive Capacity	_
Impervious Surface Cover	96.3
Traffic Density	8.8
Traffic Access	0.0
Other Indices	_
Hardship	31.5
Other Decision Support	_
2016 Voting	88.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	43.0

Healthy Places Index Score for Project Location (b)	73.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	
Operations: Vehicle Data	

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.