

**Appendix A:
Appendix A: Air Quality, Greenhouse Gas, and Energy Supporting
Information**

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Appendix A: Air Quality, Greenhouse Gas Emissions, and Energy Supporting Information

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Browns Valley Residential Project CalEEMod Notes

- Note A CalEEMod modeling for the project was divided into the following separate models:
- P1 – Demolition, site preparation, grading, paving.
 - Parking Lot – 1.03 acres = 0.53 acre cul-de-sac + 0.41 acre Street A + 0.09 acre off-site Browns Valley Road and sidewalk improvements.
 - Single Family Housing – 2.83 acres, 49,966 square feet = Proposed single-family homes, lot acreage does not include sidewalks along Street A. Sidewalks are included in Parking Lot above.
 - P2 – Building construction and architectural coatings associated with 6 of 11 homes.
 - Single Family Housing – 1 acre, 27,759 square feet = Proposed single-family homes, first 6 to be constructed. Lot acreage does not include sidewalks.
 - P3 – Building construction and architectural coatings associated with 5 remaining homes.
 - Single Family Housing – 1.83 acres, 22,207 square feet = Proposed single-family homes, remaining 5 to be constructed. Lot acreage does not include sidewalks.
 - Operations Only – Operations at 100% buildout.
 - Parking Lot – 1.03 acres = 0.53 acre cul-de-sac + 0.41 acre Street A + 0.09 acre off-site Browns Valley Road and sidewalk improvements.
 - Single Family Housing – 2.83 acres, 49,966 square feet = Proposed single-family homes, lot acreage does not include sidewalks along Street A. Sidewalks are included in Parking Lot above.
- Note B P1 consists of construction only. Land use assumptions are based on project plans and other information from the applicant.
- Note C Construction schedule information was provided by the applicant.
- Note D Construction equipment assumptions are consistent with information provided by the applicant.
- Note E The analysis assumes 632 cubic yards of export. According to the applicant, this represents the maximum soil export that could occur if site grading cannot be balanced.
- Note F Demolition figures were estimated according to EPA volume to weight conversion factors.¹
- Note G The haul trip length conservatively assumes a 40-mile one-way distance, as no receiving site has been identified yet. According to information supplied by the applicant, grading export (if required) would utilize dump trucks with a capacity of 10 cubic yards.
- Note H The analysis assumes Western Regional Air Partnership (WRAP) control efficiencies for paved road trackout reduction.²

¹ United States Environmental Protection Agency (EPA). 2016. Volume-to-Weight Conversion Factors.

² Western Regional Air Partnership (WRAP). 2006. WRAP Fugitive Dust Handbook.

- Note I The analysis assumes that Lot 1, Lot 2, Lot 3, Lot 9, Lot 10, and Lot 11 would be constructed as part of P-2. Lot acreage and building square footage assumptions are based on project plans and other information from the applicant.
- Note J Construction schedule information was provided by the applicant.
- Note K Construction equipment assumptions are consistent with information provided by the applicant.
- Note L Building construction conservatively assumes 40 worker trips per day (20 inbound/20 outbound). Architectural coating conservatively assumes 8 worker trips per day (4 inbound/4 outbound). This is consistent with CalEEMod estimates, which assume architectural coatings worker trips to be 20% of building construction worker trips.
- Note M The analysis assumes that Lot 4, Lot 5, Lot 6, Lot 7, and Lot 8 would be constructed as part of P3. Lot acreage and building square footage assumptions are based on project plans and other information from the applicant.
- Note N Construction schedule information was provided by the applicant.
- Note O Construction equipment assumptions are consistent with information provided by the applicant.
- Note P Building construction conservatively assumes 40 worker trips per day (20 inbound/20 outbound). Architectural coating conservatively assumes 8 worker trips per day (4 inbound/4 outbound). This is consistent with CalEEMod estimates, which assume architectural coatings worker trips to be 20% of building construction worker trips.
- Note Q Lot acreage and building square footage assumptions are based on project plans and other information from the applicant.
- Note R This model estimates emissions from the proposed project's operations only. No construction is included in this model. Construction models are P1, P2, and P3.
- Note S The analysis conservatively assumes that all trips would be primary trips. No diverted or pass-by trips have been accounted for by the analysis.
- Note T The proposed project would not include woodstoves or fireplaces, per applicant information.
- Note U The project's on-site renewable energy generation from photovoltaic systems was incorporated into the operational modeling to include an anticipated 30,000 kWh of production annually, based on Title 24 requirements and information from the applicant.

3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3552.0021 Browns Valley Subdivision - P1
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.03	Acre	1.03	44,866.80	0
Single Family Housing	11.00	Dwelling Unit	2.83	49,966.00	31

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note B

Construction Phase - See Note C

Off-road Equipment - See Note D

Off-road Equipment - See Note D

Off-road Equipment - See Note D

Off-road Equipment - See Note D

Trips and VMT - See Note G

Demolition - See Note F
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading - See Note E

Vehicle Trips - Construction Only

Woodstoves - Construction Only

Consumer Products - Construction Only

Area Coating - Construction Only

Energy Use - Construction Only

Water And Wastewater - Construction Only

Solid Waste - Construction Only

Construction Off-road Equipment Mitigation - See Note H

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	18.00	2.00
tblConstructionPhase	NumDays	5.00	2.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-20
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	68.41	0.00
tblEnergyUse	T24NG	23,474.54	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00

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tblFireplaces	FireplaceWoodMass	228.80	0.00
tblGrading	MaterialExported	0.00	632.00
tblLandUse	LandUseSquareFeet	19,800.00	49,966.00
tblLandUse	LotAcreage	3.57	2.83
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	187.00	250.00
tblOffRoadEquipment	HorsePower	247.00	249.00
tblOffRoadEquipment	HorsePower	97.00	202.00
tblOffRoadEquipment	HorsePower	158.00	162.00
tblOffRoadEquipment	HorsePower	367.00	280.00
tblOffRoadEquipment	HorsePower	97.00	202.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblSolidWaste	SolidWasteGenerationRate	13.02	0.00
tblTripsAndVMT	HaulingTripLength	20.00	40.00
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblTripsAndVMT	HaulingTripLength	20.00	40.00
tblTripsAndVMT	HaulingTripNumber	79.00	128.00
tblVehicleTrips	ST_TR	9.54	0.00
tblVehicleTrips	SU_TR	8.55	0.00
tblVehicleTrips	WD_TR	9.44	0.00
tblWater	IndoorWaterUseRate	716,694.28	0.00
tblWater	OutdoorWaterUseRate	451,829.00	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0109	0.1094	0.0724	3.2000e-004	0.0259	3.4600e-003	0.0294	9.0400e-003	3.1900e-003	0.0122	0.0000	28.9154	28.9154	5.9900e-003	1.7400e-003	29.5850
Maximum	0.0109	0.1094	0.0724	3.2000e-004	0.0259	3.4600e-003	0.0294	9.0400e-003	3.1900e-003	0.0122	0.0000	28.9154	28.9154	5.9900e-003	1.7400e-003	29.5850

Mitigated Construction

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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
Year	tons/yr										MT/yr					
2023	0.0109	0.1094	0.0724	3.2000e-004	0.0101	3.4600e-003	0.0136	3.5800e-003	3.1900e-003	6.7800e-003	0.0000	28.9154	28.9154	5.9900e-003	1.7400e-003	29.5849
Maximum	0.0109	0.1094	0.0724	3.2000e-004	0.0101	3.4600e-003	0.0136	3.5800e-003	3.1900e-003	6.7800e-003	0.0000	28.9154	28.9154	5.9900e-003	1.7400e-003	29.5849

	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
Percent Reduction	0.00	0.00	0.00	0.00	61.10	0.00	53.91	60.40	0.00	44.61	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)
2	10-5-2022	1-4-2023	0.0073	0.0073
3	1-5-2023	4-4-2023	0.0967	0.0967
		Highest	0.0967	0.0967

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	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	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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Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4600e-003	9.4000e-004	0.0817	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

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	tons/yr										MT/yr					
Area	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4600e-003	9.4000e-004	0.0817	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

	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
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

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	1/2/2023	1/13/2023	5	10	
2	Site Preparation	Site Preparation	1/16/2023	1/17/2023	5	2	
3	Grading	Grading	1/18/2023	1/27/2023	5	8	
4	Paving	Paving	3/13/2023	3/14/2023	5	2	

Acres of Grading (Site Preparation Phase): 0.75

Acres of Grading (Grading Phase): 6

Acres of Paving: 1.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	1	4.00	162	0.38
Demolition	Off-Highway Trucks	1	4.00	402	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	8.00	202	0.37
Site Preparation	Excavators	1	4.00	162	0.38
Site Preparation	Off-Highway Trucks	1	4.00	402	0.38
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Scrapers	1	3.00	280	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	202	0.37
Grading	Appendix A Excavators	1	4.00	162	0.38

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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	8.00	250	0.41
Grading	Off-Highway Trucks	1	4.00	402	0.38
Grading	Rubber Tired Dozers	1	4.00	249	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Rollers	1	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Demolition		3	8.00	0.00	56.00	10.80	7.30	40.00	LD_Mix	HDT_Mix	HHDT
Site Preparation		4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading		4	10.00	0.00	128.00	10.80	7.30	40.00	LD_Mix	HDT_Mix	HHDT
Paving		4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Demolition - 2023

Unmitigated Construction On-Site

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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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.3600e-003	0.0000	6.3600e-003	9.6000e-004	0.0000	9.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8600e-003	0.0234	0.0241	8.0000e-005		9.0000e-004	9.0000e-004		8.2000e-004	8.2000e-004	0.0000	6.8744	6.8744	2.2200e-003	0.0000	6.9300
Total	2.8600e-003	0.0234	0.0241	8.0000e-005	6.3600e-003	9.0000e-004	7.2600e-003	9.6000e-004	8.2000e-004	1.7800e-003	0.0000	6.8744	6.8744	2.2200e-003	0.0000	6.9300

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	9.0000e-005	7.5000e-003	1.2600e-003	3.0000e-005	9.4000e-004	6.0000e-005	1.0000e-003	2.6000e-004	6.0000e-005	3.2000e-004	0.0000	3.3196	3.3196	1.1000e-004	5.3000e-004	3.4788
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	1.0000e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2458	0.2458	1.0000e-005	1.0000e-005	0.2483
Total	2.1000e-004	7.5800e-003	2.2600e-003	3.0000e-005	1.2600e-003	6.0000e-005	1.3200e-003	3.4000e-004	6.0000e-005	4.1000e-004	0.0000	3.5654	3.5654	1.2000e-004	5.4000e-004	3.7270

Mitigated Construction On-Site

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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	tons/yr										MT/yr					
Fugitive Dust					2.4800e-003	0.0000	2.4800e-003	3.8000e-004	0.0000	3.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8600e-003	0.0234	0.0241	8.0000e-005		9.0000e-004	9.0000e-004		8.2000e-004	8.2000e-004	0.0000	6.8744	6.8744	2.2200e-003	0.0000	6.9300
Total	2.8600e-003	0.0234	0.0241	8.0000e-005	2.4800e-003	9.0000e-004	3.3800e-003	3.8000e-004	8.2000e-004	1.2000e-003	0.0000	6.8744	6.8744	2.2200e-003	0.0000	6.9300

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	9.0000e-005	7.5000e-003	1.2600e-003	3.0000e-005	3.8000e-004	6.0000e-005	4.4000e-004	1.2000e-004	6.0000e-005	1.8000e-004	0.0000	3.3196	3.3196	1.1000e-004	5.3000e-004	3.4788
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	1.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2458	0.2458	1.0000e-005	1.0000e-005	0.2483
Total	2.1000e-004	7.5800e-003	2.2600e-003	3.0000e-005	4.8000e-004	6.0000e-005	5.4000e-004	1.5000e-004	6.0000e-005	2.1000e-004	0.0000	3.5654	3.5654	1.2000e-004	5.4000e-004	3.7270

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Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					4.0000e-004	0.0000	4.0000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.0400e-003	6.5800e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.5000e-004	2.5000e-004	0.0000	1.7565	1.7565	5.7000e-004	0.0000	1.7707
Total	8.0000e-004	7.0400e-003	6.5800e-003	2.0000e-005	4.0000e-004	2.7000e-004	6.7000e-004	4.0000e-005	2.5000e-004	2.9000e-004	0.0000	1.7565	1.7565	5.7000e-004	0.0000	1.7707

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621
Total	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621

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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					
Fugitive Dust					1.6000e-004	0.0000	1.6000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.0000e-004	7.0400e-003	6.5800e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.5000e-004	2.5000e-004	0.0000	1.7565	1.7565	5.7000e-004	0.0000	1.7707
Total	8.0000e-004	7.0400e-003	6.5800e-003	2.0000e-005	1.6000e-004	2.7000e-004	4.3000e-004	2.0000e-005	2.5000e-004	2.7000e-004	0.0000	1.7565	1.7565	5.7000e-004	0.0000	1.7707

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	0.0000	0.0000	0.0000	0.0000	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	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621
Total	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621

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3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0153	0.0000	0.0153	6.9700e-003	0.0000	6.9700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8300e-003	0.0496	0.0286	9.0000e-005		1.8700e-003	1.8700e-003		1.7200e-003	1.7200e-003	0.0000	7.8741	7.8741	2.5500e-003	0.0000	7.9378
Total	4.8300e-003	0.0496	0.0286	9.0000e-005	0.0153	1.8700e-003	0.0172	6.9700e-003	1.7200e-003	8.6900e-003	0.0000	7.8741	7.8741	2.5500e-003	0.0000	7.9378

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	0.0172	2.8900e-003	8.0000e-005	2.1600e-003	1.4000e-004	2.3000e-003	5.9000e-004	1.3000e-004	7.2000e-004	0.0000	7.5877	7.5877	2.4000e-004	1.2000e-003	7.9514
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	1.0000e-003	0.0000	3.2000e-004	0.0000	3.2000e-004	8.0000e-005	0.0000	9.0000e-005	0.0000	0.2458	0.2458	1.0000e-005	1.0000e-005	0.2483
Total	3.3000e-004	0.0172	3.8900e-003	8.0000e-005	2.4800e-003	1.4000e-004	2.6200e-003	6.7000e-004	1.3000e-004	8.1000e-004	0.0000	7.8335	7.8335	2.5000e-004	1.2100e-003	8.1997

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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					
Fugitive Dust					5.9600e-003	0.0000	5.9600e-003	2.7200e-003	0.0000	2.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8300e-003	0.0496	0.0286	9.0000e-005		1.8700e-003	1.8700e-003		1.7200e-003	1.7200e-003	0.0000	7.8741	7.8741	2.5500e-003	0.0000	7.9378
Total	4.8300e-003	0.0496	0.0286	9.0000e-005	5.9600e-003	1.8700e-003	7.8300e-003	2.7200e-003	1.7200e-003	4.4400e-003	0.0000	7.8741	7.8741	2.5500e-003	0.0000	7.9378

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	2.1000e-004	0.0172	2.8900e-003	8.0000e-005	8.6000e-004	1.4000e-004	1.0000e-003	2.8000e-004	1.3000e-004	4.1000e-004	0.0000	7.5877	7.5877	2.4000e-004	1.2000e-003	7.9514
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	1.0000e-003	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.2458	0.2458	1.0000e-005	1.0000e-005	0.2483
Total	3.3000e-004	0.0172	3.8900e-003	8.0000e-005	9.6000e-004	1.4000e-004	1.1000e-003	3.1000e-004	1.3000e-004	4.4000e-004	0.0000	7.8335	7.8335	2.5000e-004	1.2100e-003	8.1997

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3.5 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	tons/yr										MT/yr					
Off-Road	4.8000e-004	4.5700e-003	6.4200e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.1000e-004	2.1000e-004	0.0000	0.8886	0.8886	2.8000e-004	0.0000	0.8956
Paving	1.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.8300e-003	4.5700e-003	6.4200e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.1000e-004	2.1000e-004	0.0000	0.8886	0.8886	2.8000e-004	0.0000	0.8956

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621

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Total	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621
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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					
Off-Road	4.8000e-004	4.5700e-003	6.4200e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.1000e-004	2.1000e-004	0.0000	0.8886	0.8886	2.8000e-004	0.0000	0.8956
Paving	1.3500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.8300e-003	4.5700e-003	6.4200e-003	1.0000e-005		2.2000e-004	2.2000e-004		2.1000e-004	2.1000e-004	0.0000	0.8886	0.8886	2.8000e-004	0.0000	0.8956

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	0.0000	0.0000	0.0000	0.0000	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

Worker	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621
Total	3.0000e-005	2.0000e-005	2.5000e-004	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0615	0.0615	0.0000	0.0000	0.0621

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	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

Appendix A

4.3 Trip Type Information

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147
Single Family Housing	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	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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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
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	0.0000
Single Family Housing	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	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

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Single Family Housing	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
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

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Unmitigated	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					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	0.0000

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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	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

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	tons/yr										MT/yr					
Architectural Coating	0.0000					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	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	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

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			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3552.0021 Browns Valley Subdivision - P2
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	6.00	Dwelling Unit	1.00	27,759.00	17

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note I

Construction Phase - See Note J

Off-road Equipment -

Off-road Equipment - See Note K

Trips and VMT - See Note L

Vehicle Trips - Construction Only

Woodstoves - Construction Only

Consumer Products - Construction Only

Area Coating - Construction Only

Appendix A

3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Energy Use - Construction Only

Water And Wastewater - Construction Only

Solid Waste - Construction Only

Construction Off-road Equipment Mitigation - See Note H

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	7.00
tblConstructionPhase	NumDays	100.00	125.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-19
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-19
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-19
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	68.41	0.00
tblEnergyUse	T24NG	23,474.54	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblLandUse	LandUseSquareFeet	10,800.00	27,759.00
tblLandUse	LotAcreage	1.95	1.00
tblOffRoadEquipment	HorsePower	100.00	74.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	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

tblOffRoadEquipment	UsageHours	4.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblSolidWaste	SolidWasteGenerationRate	7.14	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	9.54	0.00
tblVehicleTrips	SU_TR	8.55	0.00
tblVehicleTrips	WD_TR	9.44	0.00
tblWater	IndoorWaterUseRate	390,924.15	0.00
tblWater	OutdoorWaterUseRate	246,452.18	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2050	0.0291	0.0968	2.3000e-004	0.0204	8.9000e-004	0.0213	5.4300e-003	8.4000e-004	6.2700e-003	0.0000	21.1782	21.1782	1.7300e-003	6.7000e-004	21.4218
Maximum	0.2050	0.0291	0.0968	2.3000e-004	0.0204	8.9000e-004	0.0213	5.4300e-003	8.4000e-004	6.2700e-003	0.0000	21.1782	21.1782	1.7300e-003	6.7000e-004	21.4218

3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	0.2050	0.0291	0.0968	2.3000e-004	6.3500e-003	8.9000e-004	7.2400e-003	1.9900e-003	8.4000e-004	2.8300e-003	0.0000	21.1782	21.1782	1.7300e-003	6.7000e-004	21.4218
Maximum	0.2050	0.0291	0.0968	2.3000e-004	6.3500e-003	8.9000e-004	7.2400e-003	1.9900e-003	8.4000e-004	2.8300e-003	0.0000	21.1782	21.1782	1.7300e-003	6.7000e-004	21.4218

	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
Percent Reduction	0.00	0.00	0.00	0.00	68.86	0.00	65.96	63.35	0.00	54.86	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	3-20-2023	6-19-2023	0.0175	0.0175
2	6-20-2023	9-19-2023	0.1997	0.1997
		Highest	0.1997	0.1997

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	Appendix A 0.003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	Page 452

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/20/2023	9/8/2023	5	125	
2	Architectural Coating	Architectural Coating	9/11/2023	9/19/2023	5	7	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 56,212; Residential Outdoor: 18,737; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	1	2.00	74	0.40
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	7.0000e-005	2.9600e-003	8.9000e-004	1.0000e-005	4.1000e-004	2.0000e-005	4.3000e-004	1.2000e-004	2.0000e-005	1.3000e-004	0.0000	1.2493	1.2493	3.0000e-005	1.9000e-004	1.3055
Worker	7.5400e-003	5.3000e-003	0.0624	1.7000e-004	0.0198	1.0000e-004	0.0199	5.2600e-003	1.0000e-004	5.3500e-003	0.0000	15.3618	15.3618	5.2000e-004	4.8000e-004	15.5179
Total	7.6100e-003	8.2600e-003	0.0633	1.8000e-004	0.0202	1.2000e-004	0.0203	5.3800e-003	1.2000e-004	5.4800e-003	0.0000	16.6112	16.6112	5.5000e-004	6.7000e-004	16.8233

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					
Off-Road	1.2200e-003	0.0162	0.0265	4.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	3.5014	3.5014	1.1300e-003	0.0000	3.5297
Total	1.2200e-003	0.0162	0.0265	4.0000e-005		5.2000e-004	5.2000e-004		4.8000e-004	4.8000e-004	0.0000	3.5014	3.5014	1.1300e-003	0.0000	3.5297

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
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3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	7.0000e-005	2.9600e-003	8.9000e-004	1.0000e-005	1.8000e-004	2.0000e-005	2.0000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	1.2493	1.2493	3.0000e-005	1.9000e-004	1.3055
Worker	7.5400e-003	5.3000e-003	0.0624	1.7000e-004	6.1000e-003	1.0000e-004	6.2000e-003	1.9000e-003	1.0000e-004	2.0000e-003	0.0000	15.3618	15.3618	5.2000e-004	4.8000e-004	15.5179
Total	7.6100e-003	8.2600e-003	0.0633	1.8000e-004	6.2800e-003	1.2000e-004	6.4000e-003	1.9600e-003	1.2000e-004	2.0800e-003	0.0000	16.6112	16.6112	5.5000e-004	6.7000e-004	16.8233

3.3 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5600e-003	6.3400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8950
Total	0.1961	4.5600e-003	6.3400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8950

Unmitigated Construction Off-Site

3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1721	0.1721	1.0000e-005	1.0000e-005	0.1738
Total	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1721	0.1721	1.0000e-005	1.0000e-005	0.1738

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	0.1954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5600e-003	6.3400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8950
Total	0.1961	4.5600e-003	6.3400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8950

Mitigated Construction Off-Site

3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	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	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1721	0.1721	1.0000e-005	1.0000e-005	0.1738
Total	8.0000e-005	6.0000e-005	7.0000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1721	0.1721	1.0000e-005	1.0000e-005	0.1738

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	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Electricity Mitigated						0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	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
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

Mitigated

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

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Single Family Housing	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	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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000
	Appendix				

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745
Unmitigated	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					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	0.0000

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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	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745
Total	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745

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	tons/yr										MT/yr					
Architectural Coating	0.0000					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	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	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745
Total	1.3400e-003	5.1000e-004	0.0445	0.0000		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.0728	0.0728	7.0000e-005	0.0000	0.0745

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			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated Appendix A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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 Not Applied

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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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**3552.0021 Browns Valley Subdivision - P3
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	5.00	Dwelling Unit	1.83	22,207.00	14

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MW hr)	203.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - See Note A

Land Use - See Note M

Construction Phase - See Note N

Off-road Equipment - See Note O

Trips and VMT - See Note P

Vehicle Trips - Construction Only

Woodstoves - Construction Only

Consumer Products - Construction Only

Area Coating - Construction Only

Energy Use - Construction Only

Appendix A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water And Wastewater - Construction Only

Solid Waste - Construction Only

Construction Off-road Equipment Mitigation - See Note H

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	200.00	105.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-20
tblEnergyUse	LightingElect	1,608.84	0.00
tblEnergyUse	NT24E	6,155.97	0.00
tblEnergyUse	NT24NG	3,155.00	0.00
tblEnergyUse	T24E	68.41	0.00
tblEnergyUse	T24NG	23,474.54	0.00
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblLandUse	LandUseSquareFeet	9,000.00	22,207.00
tblLandUse	LotAcreage	1.62	1.83
tblOffRoadEquipment	HorsePower	100.00	74.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblSolidWaste	SolidWasteGenerationRate	5.88	0.00
tblTripsAndVMT	WorkerTripNumber	2.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	8.00
tblVehicleTrips	ST_TR	9.54	0.00
tblVehicleTrips	SU_TR	8.55	0.00
tblVehicleTrips	WD_TR	9.44	0.00
tblWater	IndoorWaterUseRate	325,770.13	0.00
tblWater	OutdoorWaterUseRate	205,376.82	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	5.1600e-003	0.0143	0.0524	1.3000e-004	0.0118	3.7000e-004	0.0122	3.1400e-003	3.4000e-004	3.4800e-003	0.0000	11.7457	11.7457	9.8000e-004	3.9000e-004	11.8862
2024	0.1590	9.0400e-003	0.0268	6.0000e-005	5.3200e-003	3.0000e-004	5.6200e-003	1.4200e-003	2.9000e-004	1.7100e-003	0.0000	5.7756	5.7756	4.6000e-004	1.6000e-004	5.8360
Maximum	0.1590	0.0143	0.0524	1.3000e-004	0.0118	3.7000e-004	0.0122	3.1400e-003	3.4000e-004	3.4800e-003	0.0000	11.7457	11.7457	9.8000e-004	3.9000e-004	11.8862

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Category	tons/yr										MT/yr					
Area	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1200e-003	4.3000e-004	0.0371	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621

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	tons/yr										MT/yr					
Area	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.1200e-003	4.3000e-004	0.0371	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621

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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
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	Building Construction	Building Construction	9/20/2023	2/13/2024	5	105	
2	Architectural Coating	Architectural Coating	2/14/2024	2/20/2024	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 44,969; Residential Outdoor: 14,990; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Rough Terrain Forklifts	1	2.00	74	0.40
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Building Construction	1	40.00	1.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 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	tons/yr										MT/yr					
Off-Road	7.1000e-004	9.4500e-003	0.0154	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	2.0448	2.0448	6.6000e-004	0.0000	2.0613
Total	7.1000e-004	9.4500e-003	0.0154	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	2.0448	2.0448	6.6000e-004	0.0000	2.0613

Unmitigated Construction Off-Site

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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	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	4.0000e-005	1.7300e-003	5.2000e-004	1.0000e-005	2.4000e-004	1.0000e-005	2.5000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.7296	0.7296	1.0000e-005	1.1000e-004	0.7624
Worker	4.4100e-003	3.0900e-003	0.0364	1.0000e-004	0.0115	6.0000e-005	0.0116	3.0700e-003	6.0000e-005	3.1200e-003	0.0000	8.9713	8.9713	3.0000e-004	2.8000e-004	9.0624
Total	4.4500e-003	4.8200e-003	0.0370	1.1000e-004	0.0118	7.0000e-005	0.0119	3.1400e-003	7.0000e-005	3.2000e-003	0.0000	9.7009	9.7009	3.1000e-004	3.9000e-004	9.8248

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					
Off-Road	7.1000e-004	9.4500e-003	0.0154	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	2.0448	2.0448	6.6000e-004	0.0000	2.0613
Total	7.1000e-004	9.4500e-003	0.0154	2.0000e-005		3.0000e-004	3.0000e-004		2.8000e-004	2.8000e-004	0.0000	2.0448	2.0448	6.6000e-004	0.0000	2.0613

Mitigated Construction Off-Site

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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	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	4.0000e-005	1.7300e-003	5.2000e-004	1.0000e-005	1.0000e-004	1.0000e-005	1.1000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.7296	0.7296	1.0000e-005	1.1000e-004	0.7624
Worker	4.4100e-003	3.0900e-003	0.0364	1.0000e-004	3.5600e-003	6.0000e-005	3.6200e-003	1.1100e-003	6.0000e-005	1.1700e-003	0.0000	8.9713	8.9713	3.0000e-004	2.8000e-004	9.0624
Total	4.4500e-003	4.8200e-003	0.0370	1.1000e-004	3.6600e-003	7.0000e-005	3.7300e-003	1.1500e-003	7.0000e-005	1.2200e-003	0.0000	9.7009	9.7009	3.1000e-004	3.9000e-004	9.8248

3.2 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.0000e-004	4.0000e-003	6.7800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.1000e-004	1.1000e-004	0.0000	0.8962	0.8962	2.9000e-004	0.0000	0.9034
Total	3.0000e-004	4.0000e-003	6.7800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.1000e-004	1.1000e-004	0.0000	0.8962	0.8962	2.9000e-004	0.0000	0.9034

Unmitigated Construction Off-Site

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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	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	2.0000e-005	7.6000e-004	2.2000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3156	0.3156	1.0000e-005	5.0000e-005	0.3297
Worker	1.8000e-003	1.2000e-003	0.0148	4.0000e-005	5.0600e-003	3.0000e-005	5.0800e-003	1.3500e-003	2.0000e-005	1.3700e-003	0.0000	3.8065	3.8065	1.2000e-004	1.1000e-004	3.8435
Total	1.8200e-003	1.9600e-003	0.0150	4.0000e-005	5.1600e-003	3.0000e-005	5.1900e-003	1.3800e-003	2.0000e-005	1.4000e-003	0.0000	4.1221	4.1221	1.3000e-004	1.6000e-004	4.1732

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					
Off-Road	3.0000e-004	4.0000e-003	6.7800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.1000e-004	1.1000e-004	0.0000	0.8962	0.8962	2.9000e-004	0.0000	0.9034
Total	3.0000e-004	4.0000e-003	6.7800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.1000e-004	1.1000e-004	0.0000	0.8962	0.8962	2.9000e-004	0.0000	0.9034

Mitigated Construction Off-Site

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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	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	2.0000e-005	7.6000e-004	2.2000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3156	0.3156	1.0000e-005	5.0000e-005	0.3297
Worker	1.8000e-003	1.2000e-003	0.0148	4.0000e-005	1.5600e-003	3.0000e-005	1.5900e-003	4.9000e-004	2.0000e-005	5.1000e-004	0.0000	3.8065	3.8065	1.2000e-004	1.1000e-004	3.8435
Total	1.8200e-003	1.9600e-003	0.0150	4.0000e-005	1.6100e-003	3.0000e-005	1.6400e-003	5.1000e-004	2.0000e-005	5.3000e-004	0.0000	4.1221	4.1221	1.3000e-004	1.6000e-004	4.1732

3.3 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	0.1568	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1190	0.1190	0.0000	0.0000	0.1201
Total	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1190	0.1190	0.0000	0.0000	0.1201

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	0.1563					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e-004	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392
Total	0.1568	3.0500e-003	4.5300e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6392

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0000	0.0000	0.0000	0.0000	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	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1190	0.1190	0.0000	0.0000	0.1201
Total	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.1190	0.1190	0.0000	0.0000	0.1201

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	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Appendix A																

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated	0.0000	0.0000	0.0000	0.0000	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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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG Appendix A	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 Page 62
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category	tons/yr								MT/yr										
	Electricity Mitigated						0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000			0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	tons/yr										MT/yr						
Single Family Housing	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	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

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	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
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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
	Appendix A				

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		0.0000	0.0000	0.0000	0.0000
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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621
Unmitigated	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621

6.2 Area by SubCategory

Unmitigated

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

Consumer Products	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
Landscaping	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0621
Total	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0621

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	tons/yr										MT/yr					
Architectural Coating	0.0000					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	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	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621
Total	1.1200e-003	4.3000e-004	0.0371	0.0000		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.0606	0.0606	6.0000e-005	0.0000	0.0621

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			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated Appendix A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
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User Defined Equipment

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 Not Applied

**3552.0021 Browns Valley Subdivision - Operations Only
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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.03	Acre	1.03	44,866.80	0
Single Family Housing	11.00	Dwelling Unit	2.83	49,966.00	31

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2024
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - See Note A
- Land Use - See Note Q
- Construction Phase - Operation Only
- Off-road Equipment -
- Vehicle Trips - See Note S
- Woodstoves - See Note T
- Energy Mitigation - See Note U

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	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

tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	2.75	0.00
tblFireplaces	NumberNoFireplace	0.88	0.00
tblFireplaces	NumberWood	4.73	0.00
tblLandUse	LandUseSquareFeet	19,800.00	49,966.00
tblLandUse	LotAcreage	3.57	2.83
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblWoodstoves	NumberCatalytic	0.44	0.00
tblWoodstoves	NumberNoncatalytic	0.44	0.00
tblWoodstoves	WoodstoveDayYear	21.06	0.00
tblWoodstoves	WoodstoveWoodMass	956.80	0.00

2.0 Emissions Summary

	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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

**2.2 Overall Operational
Unmitigated Operational**

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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	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	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Energy	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	25.0569	25.0569	1.8200e-003	4.7000e-004	25.2430
Mobile	0.0497	0.0776	0.4665	9.7000e-004	0.0989	8.6000e-004	0.0998	0.0265	8.1000e-004	0.0273	0.0000	89.5591	89.5591	5.8300e-003	4.9600e-003	91.1835
Waste						0.0000	0.0000		0.0000	0.0000	2.6429	0.0000	2.6429	0.1562	0.0000	6.5478
Water						0.0000	0.0000		0.0000	0.0000	0.2274	0.5051	0.7325	0.0234	5.6000e-004	1.4857
Total	0.2879	0.0920	0.5539	1.0600e-003	0.0989	2.4000e-003	0.1013	0.0265	2.3500e-003	0.0289	2.8703	115.2546	118.1249	0.1874	5.9900e-003	124.5966

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	tons/yr										MT/yr					
Area	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Energy	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	22.2812	22.2812	1.3800e-003	4.2000e-004	22.4398
Mobile	0.0497	0.0776	0.4665	9.7000e-004	0.0989	8.6000e-004	0.0998	0.0265	8.1000e-004	0.0273	0.0000	89.5591	89.5591	5.8300e-003	4.9600e-003	91.1835
Waste	Appendix A					0.0000	0.0000		0.0000	0.0000	2.6429	0.0000	2.6429	0.1562	0.0000	6.5478

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water						0.0000	0.0000		0.0000	0.0000	0.2274	0.5051	0.7325	0.0234	5.6000e-004	1.4857
Total	0.2879	0.0920	0.5539	1.0600e-003	0.0989	2.4000e-003	0.1013	0.0265	2.3500e-003	0.0289	2.8703	112.4789	115.3492	0.1870	5.9400e-003	121.7934

	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	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	2.41	2.35	0.23	0.83	2.25

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	1/1/2024	12/31/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.03

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating

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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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	tons/yr										MT/yr					
Mitigated	0.0497	0.0776	0.4665	9.7000e-004	0.0989	8.6000e-004	0.0998	0.0265	8.1000e-004	0.0273	0.0000	89.5591	89.5591	5.8300e-003	4.9600e-003	91.1835
Unmitigated	0.0497	0.0776	0.4665	9.7000e-004	0.0989	8.6000e-004	0.0998	0.0265	8.1000e-004	0.0273	0.0000	89.5591	89.5591	5.8300e-003	4.9600e-003	91.1835

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	103.84	104.94	94.05	266,874	266,874
Total	103.84	104.94	94.05	266,874	266,874

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	4.80	5.70	31.00	15.00	54.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147
Single Family Housing	0.535449	0.056642	0.175177	0.133432	0.032505	0.007974	0.012804	0.010998	0.001732	0.000629	0.026564	0.001947	0.004147

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6.6496	6.6496	1.0800e-003	1.3000e-004	6.7153
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	9.4253	9.4253	1.5200e-003	1.8000e-004	9.5185
Natural Gas Mitigated	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

NaturalGas Unmitigated	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245
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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Single Family Housing	292925	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245
Total		1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Single Family Housing	292925	1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		1.5800e-003	0.0135	5.7400e-003	9.0000e-005		1.0900e-003	1.0900e-003		1.0900e-003	1.0900e-003	0.0000	15.6316	15.6316	3.0000e-004	2.9000e-004	15.7245
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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	15703.4	1.4529	2.4000e-004	3.0000e-005	1.4673
Single Family Housing	86165.4	7.9724	1.2900e-003	1.6000e-004	8.0512
Total		9.4253	1.5300e-003	1.9000e-004	9.5185

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	703.38	0.0651	1.0000e-005	0.0000	0.0657
Single Family Housing	71165.4	6.5845	1.0700e-003	1.3000e-004	6.6496

Appendix A

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total		6.6496	1.0800e-003	1.3000e-004	6.7153
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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Unmitigated	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0361					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

Consumer Products	0.1980					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	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

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	tons/yr										MT/yr					
Architectural Coating	0.0361					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1980					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	2.4600e-003	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366
Total	0.2366	9.4000e-004	0.0817	0.0000		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.1334	0.1334	1.3000e-004	0.0000	0.1366

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			
Mitigated	0.7325	0.0234	5.6000e-004	1.4857
Unmitigated	0.7325	0.0234	5.6000e-004	1.4857

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.716694 / 0.451829	0.7325	0.0234	5.6000e-004	1.4857
Total		0.7325	0.0234	5.6000e-004	1.4857

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.716694 / 0.451829	0.7325	0.0234	5.6000e-004	1.4857
Total		0.7325	0.0234	5.6000e-004	1.4857

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.6429	0.1562	0.0000	6.5478
Unmitigated	2.6429	0.1562	0.0000	6.5478

8.2 Waste by Land Use

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.02	2.6429	0.1562	0.0000	6.5478
Total		2.6429	0.1562	0.0000	6.5478

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.02	2.6429	0.1562	0.0000	6.5478
Total		2.6429	0.1562	0.0000	6.5478

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
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Boilers

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

Equipment Type	Number
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11.0 Vegetation

Browns Valley Construction Trailer - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Browns Valley Construction Trailer
Napa County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.6	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2023
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use -
- Construction Phase -
- Off-road Equipment - See Note D
- Trips and VMT -
- Demolition -
- Grading -
- Construction Off-road Equipment Mitigation - See Note H
- Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	80

Browns Valley Construction Trailer - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	PhaseEndDate	7/28/2022	7/28/2023
tblConstructionPhase	PhaseStartDate	7/22/2022	7/22/2023

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	4.2300e-003	3.2600e-003	4.5300e-003	1.0000e-005	0.0000	1.8000e-004	1.8000e-004	0.0000	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Maximum	4.2300e-003	3.2600e-003	4.5300e-003	1.0000e-005	0.0000	1.8000e-004	1.8000e-004	0.0000	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

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					
2023	4.2300e-003	3.2600e-003	4.5300e-003	1.0000e-005	0.0000	1.8000e-004	1.8000e-004	0.0000	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393
Maximum	4.2300e-003	3.2600e-003	4.5300e-003	1.0000e-005	0.0000	1.8000e-004	1.8000e-004	0.0000	1.8000e-004	1.8000e-004	0.0000	0.6383	0.6383	4.0000e-005	0.0000	0.6393

Browns Valley Construction Trailer - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
5	7-5-2023	9-30-2023	0.0075	0.0075
		Highest	0.0075	0.0075

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	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	1.7663	1.7663	2.0000e-004	3.0000e-005	1.7813
Mobile	5.0300e-003	6.7800e-003	0.0413	8.0000e-005	7.3900e-003	7.0000e-005	7.4600e-003	1.9800e-003	7.0000e-005	2.0500e-003	0.0000	7.0107	7.0107	5.6000e-004	4.3000e-004	7.1530
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0454	0.1000	0.1454	4.6800e-003	1.1000e-004	0.2957
Total	8.2800e-003	7.3500e-003	0.0418	8.0000e-005	7.3900e-003	1.1000e-004	7.5000e-003	1.9800e-003	1.1000e-004	2.0900e-003	0.1814	8.8769	9.0583	0.0135	5.7000e-004	9.5669

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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

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	tons/yr										MT/yr					
Area	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	1.7663	1.7663	2.0000e-004	3.0000e-005	1.7813
Mobile	5.0300e-003	6.7800e-003	0.0413	8.0000e-005	7.3900e-003	7.0000e-005	7.4600e-003	1.9800e-003	7.0000e-005	2.0500e-003	0.0000	7.0107	7.0107	5.6000e-004	4.3000e-004	7.1530
Waste						0.0000	0.0000		0.0000	0.0000	0.1360	0.0000	0.1360	8.0400e-003	0.0000	0.3369
Water						0.0000	0.0000		0.0000	0.0000	0.0454	0.1000	0.1454	4.6800e-003	1.1000e-004	0.2957
Total	8.2800e-003	7.3500e-003	0.0418	8.0000e-005	7.3900e-003	1.1000e-004	7.5000e-003	1.9800e-003	1.1000e-004	2.0900e-003	0.1814	8.8769	9.0583	0.0135	5.7000e-004	9.5669

	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
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	Coating	Architectural Coating	7/22/2023	7/28/2023	5	5	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,080; Non-Residential Outdoor: 360; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Coating	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Browns Valley Construction Trailer - Napa County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.7500e-003					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	4.2300e-003	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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	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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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 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	tons/yr										MT/yr					
Archit. Coating	3.7500e-003					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	4.2300e-003	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

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	0.0000	0.0000	0.0000	0.0000	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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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	tons/yr										MT/yr					
Mitigated	5.0300e-003	6.7800e-003	0.0413	8.0000e-005	7.3900e-003	7.0000e-005	7.4600e-003	1.9800e-003	7.0000e-005	2.0500e-003	0.0000	7.0107	7.0107	5.6000e-004	4.3000e-004	7.1530
Unmitigated	5.0300e-003	6.7800e-003	0.0413	8.0000e-005	7.3900e-003	7.0000e-005	7.4600e-003	1.9800e-003	7.0000e-005	2.0500e-003	0.0000	7.0107	7.0107	5.6000e-004	4.3000e-004	7.1530

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Government Office Building	16.26	0.00	0.00	19,923	19,923
Total	16.26	0.00	0.00	19,923	19,923

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Government Office Building	9.50	7.30	7.30	33.00	62.00	5.00	50	34	16

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Government Office Building	0.527728	0.057239	0.176957	0.136995	0.033875	0.008168	0.012713	0.010801	0.001751	0.000635	0.026841	0.001963	0.004336

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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	1.1438	1.1438	1.9000e-004	2.0000e-005	1.1551
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.1438	1.1438	1.9000e-004	2.0000e-005	1.1551
NaturalGas Mitigated	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261
NaturalGas Unmitigated	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261

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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

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	11664	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261
Total		6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Government Office Building	11664	6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261
Total		6.0000e-005	5.7000e-004	4.8000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.6224	0.6224	1.0000e-005	1.0000e-005	0.6261

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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

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	12362.4	1.1438	1.9000e-004	2.0000e-005	1.1551
Total		1.1438	1.9000e-004	2.0000e-005	1.1551

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Government Office Building	12362.4	1.1438	1.9000e-004	2.0000e-005	1.1551
Total		1.1438	1.9000e-004	2.0000e-005	1.1551

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	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-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	tons/yr										MT/yr					
Architectural Coating	3.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-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	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

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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	tons/yr										MT/yr					
Architectural Coating	3.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8100e-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	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	3.1900e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-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			
Mitigated	0.1454	4.6800e-003	1.1000e-004	0.2957
Unmitigated	0.1454	4.6800e-003	1.1000e-004	0.2957

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.143035 / 0.0876666	0.1454	4.6800e-003	1.1000e-004	0.2957
Total		0.1454	4.6800e-003	1.1000e-004	0.2957

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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/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Government Office Building	0.143035 / 0.0876666	0.1454	4.6800e-003	1.1000e-004	0.2957
Total		0.1454	4.6800e-003	1.1000e-004	0.2957

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1360	8.0400e-003	0.0000	0.3369
Unmitigated	0.1360	8.0400e-003	0.0000	0.3369

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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			
Government Office Building	0.67	0.1360	8.0400e-003	0.0000	0.3369
Total		0.1360	8.0400e-003	0.0000	0.3369

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Government Office Building	0.67	0.1360	8.0400e-003	0.0000	0.3369
Total		0.1360	8.0400e-003	0.0000	0.3369

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
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Boilers

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

Equipment Type	Number
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11.0 Vegetation

Browns Valley Residential Energy Consumption Summary

Summary of Energy Use During Construction

Construction equipment fuel	2,653 gallons (diesel)
Construction vehicle fuel	3,902 gallons (gasoline, diesel)
Total construction fuel	6,555 gallons (gasoline, diesel)
Construction office electricity	14,022 kilowatt hours

Summary of Energy Use During Operations

(Annually)

Operation vehicle fuel	10,659 gallons (gasoline, diesel)
Operation electricity	101,868 kilowatt hours

Construction Equipment Fuel Calculation

Source: AQ/GHG Appendix, CalEEMod Output

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual
 Time stamp: Date: 7/21/2022 11:14 AM

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual
 Time stamp: Date: 7/21/2022 10:23 AM

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P3 - Napa County, Annual
 Time stamp: Date: 7/22/2022 8:24 AM

Phase	Phase Name	Phase Type	Start Date	End Date	Week	Num Days
Phase 1	Demolition	Demolition	1/2/2023	1/13/2023	5	10
Phase 1	Site Preparation	Site Preparation	1/16/2023	1/17/2023	5	2
Phase 1	Grading	Grading	1/18/2023	1/27/2023	5	8
Phase 1	Paving	Paving	3/12/2023	3/14/2023	5	2
Phase 2	Building Construction	Building Construction	3/20/2023	9/8/2023	5	125
Phase 2	Architectural Coating	Architectural Coating	9/11/2023	9/19/2023	5	7
Phase 3	Building Construction	Building Construction	9/20/2023	2/13/2024	5	105
Phase 3	Architectural Coating	Architectural Coating	2/14/2024	2/20/2024	5	5

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Diesel Fuel Usage	
Phase 1									
Demolition	Excavators	1	4	162	0.38	10	2,462.40	123.12	
Demolition	Off-Highway Trucks	1	4	402	0.38	10	6,110.40	305.52	
Demolition	Tractors/Loaders/Backhoes	1	8	202	0.37	10	5,979.20	298.96	
Site Preparation	Excavators	1	4	162	0.38	2	492.48	24.62	
Site Preparation	Off-Highway Trucks	1	4	402	0.38	2	1,222.08	61.10	
Site Preparation	Scrapers	1	3	280	0.48	2	806.40	40.32	
Site Preparation	Tractors/Loaders/Backhoes	1	8	202	0.37	2	1,195.84	59.79	
Grading	Excavators	1	4	162	0.38	8	1,969.92	98.50	
Grading	Graders	1	8	250	0.41	8	6,560.00	328.00	
Grading	Off-Highway Trucks	1	4	402	0.38	8	4,888.32	244.42	
Grading	Rubber Tired Dozers	1	4	249	0.4	8	3,187.20	159.36	
Paving	Cement and Mortar Mixers	1	6	9	0.56	2	60.48	3.02	
Paving	Pavers	1	8	130	0.42	2	873.60	43.68	
Paving	Paving Equipment	1	6	132	0.36	2	570.24	28.51	
Paving	Rollers	1	6	80	0.38	2	364.80	18.24	
Phase 2									
Building Construction	Rough Terrain Forklifts	1	2	74	0.4	125	7,400.00	370.00	
Architectural Coating	Air Compressors	1	6	78	0.48	7	1,572.48	78.62	
Phase 3									
Building Construction	Rough Terrain Forklifts	1	2	74	0.4	105	6,216.00	310.80	
Architectural Coating	Air Compressors	1	6	78	0.48	5	1,123.20	56.16	
Construction Equipment Fuel Consumption								2,652.75	gallons

Notes:

Equipment assumptions are provided in the CalEEMod output files.
 Fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.
 South Coast Air Quality Management District. 1993. Air Quality Handbook, Table A9-3E.
 Website: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). 2022. EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>

VMT = Vehicle Miles Traveled

FE = Fuel Economy

Source: EMFAC2021 (v1.0.2) Emissions Inventory

Region Type: County

Region: Napa

Calendar Year: 2023

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	Fuel Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
2023	HHDT	Aggregate	Aggregate	Gasoline	0.64587565	63.618706	0.018716538	3.39906371	216.2440361
2023	HHDT	Aggregate	Aggregate	Diesel	1000.27217	110008.77	19.18774181	5.73328364	630711.4597
2023	LDA	Aggregate	Aggregate	Gasoline	40957.6942	1673062	55.8419705	29.9606544	50126031.78
2023	LDA	Aggregate	Aggregate	Diesel	261.964978	7826.5512	0.183342622	42.6881164	334100.7268
2023	LDT1	Aggregate	Aggregate	Gasoline	5324.8509	178129.69	7.204776444	24.7238336	4404048.922
2023	LDT1	Aggregate	Aggregate	Diesel	3.89021768	40.402403	0.001622557	24.9004559	1006.038252
2023	LDT2	Aggregate	Aggregate	Gasoline	21269.2145	849077.36	35.58133379	23.8629998	20261532.91
2023	LDT2	Aggregate	Aggregate	Diesel	115.53585	4789.8667	0.150510542	31.8241279	152433.3312
2023	LHDT1	Aggregate	Aggregate	Gasoline	2490.76789	88783.902	9.729386039	9.1253345	810182.804
2023	LHDT1	Aggregate	Aggregate	Diesel	2264.12191	81734.749	5.213711817	15.6768828	1281346.084
2023	LHDT2	Aggregate	Aggregate	Gasoline	302.961907	10641.623	1.318553334	8.07068056	85885.13788
2023	LHDT2	Aggregate	Aggregate	Diesel	837.449232	31740.411	2.466835624	12.8668529	408399.2026
2023	MHDT	Aggregate	Aggregate	Gasoline	148.725562	7063.6578	1.531994916	4.61075796	32568.81627
2023	MHDT	Aggregate	Aggregate	Diesel	1341.32295	56889.373	6.736625171	8.4447882	480418.7036

Worker	
Sum of VMT*FE (Column BI)	75279153.7
Total VMT	2712925.855
Weighted Average FE	27.74832698

Vendor	
Sum of VMT*FE (Column BI)	3729728.452
Total VMT	386926.1006
Weighted Average FE	9.639381903

Haul	
Sum of VMT*FE (Column BI)	630927.7037
Total VMT	110072.3849
Weighted Average FE	5.731934527

Project Construction Assumptions

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual
 Time stamp: Date: 7/21/2022 11:14 AM

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual
 Time stamp: Date: 7/21/2022 10:23 AM

CalEEMod output file: 3552.0021 Browns Valley Subdivision - P3 - Napa County, Annual
 Time stamp: Date: 7/22/2022 8:24 AM

Construction Schedule	Phase Name	Phase Type	Start Date	End Date	Num Days	
					Week	Num Days
Phase 1	Demolition	Demolition	1/2/2023	1/13/2023	5	10
Phase 1	Site Preparation	Site Preparation	1/16/2023	1/17/2023	5	2
Phase 1	Grading	Grading	1/18/2023	1/27/2023	5	8
Phase 1	Paving	Paving	3/12/2023	3/14/2023	5	2
Phase 2	Building Construction	Building Construction	3/20/2023	9/8/2023	5	125
Phase 2	Architectural Coating	Architectural Coating	9/11/2023	9/19/2023	5	7
Phase 3	Building Construction	Building Construction	9/20/2023	2/13/2024	5	105
Phase 3	Architectural Coating	Architectural Coating	2/14/2024	2/20/2024	5	5

Phase	Phase Name	Trips per Day			Total Trips			Num Days	Trips per Phase			VMT per Phase			Fuel Consumption (gallons)				
		Worker Trip		Vendor Trip	Hauling Trip		Worker Trip		Vendor Trip	Hauling Trip	Hauling Trip		Hauling		Hauling				
		Number	Length	Number	Length	Length	Length		Number	Number	Number	Number	Number	Number	Number	Number			
Phase 1	Demolition	8	0	0	56	10.8	7.3	40	HDT_Mix	10	80	0	56	864	0	2,240	31.14	0	10
Phase 1	Site Preparation	10	0	0	0	10.8	7.3	20	HDT_Mix	2	20	0	0	216	0	0	7.78	0	0
Phase 1	Grading	10	0	128	0	10.8	7.3	40	HDT_Mix	8	80	0	128	864	0	5,120	31.14	0	22
Phase 1	Paving	10	0	0	0	10.8	7.3	20	HDT_Mix	2	20	0	0	216	0	0	7.78	0	0
Phase 2	Building Construction	40	1	0	0	10.8	7.3	20	HDT_Mix	125	5,000	125	0	54,000	913	0	1,946.06	95	0
Phase 2	Architectural Coating	8	0	0	0	10.8	7.3	20	HDT_Mix	7	56	0	0	605	0	0	21.80	0	0
Phase 3	Building Construction	40	1	0	0	10.8	7.3	20	HDT_Mix	105	4,200	105	0	45,360	767	0	1,634.69	80	0
Phase 3	Architectural Coating	8	0	0	0	10.8	7.3	20	HDT_Mix	5	40	0	0	432	0	0	15.57	0	0

Total Construction VMT (miles)
111,596

Total Fuel Consumption (gallons)
3,902

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Browns Valley Construction Trailer - Napa County, Annual

Date: 7/14/2022 11:27 PM

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual

12,362 kWh/yr

Total Over Construction

14,022 kWh

Total Construction Schedule

Start

1/2/2023

End

2/20/2024

Total Calendar Days

414

Years

1.13

Proposed Operation Fuel Calculation

California Air Resource Board (ARB). 2022. EMFAC2021 Web Database. Website: <https://arb.ca.gov/emfac/emissions-inventory/>

Source: EMFAC2021 (v1.0.2) Emissions Inventory

VMT = Vehicle Miles Traveled

Region Type: County

FE = Fuel Economy

Region: Napa

Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel	Calculations	
						Consumptio	FE	VMT*FE
HHDT	Aggregate	Aggregate	Gasoline	0.575464228	54.3899224	0.01585944	3.429499248	186.530198
HHDT	Aggregate	Aggregate	Diesel	1022.160894	109847.139	18.9456488	5.798014103	636895.262
LDA	Aggregate	Aggregate	Gasoline	40855.51283	1689399.29	55.2438755	30.5807526	51663101.69
LDA	Aggregate	Aggregate	Diesel	244.7256981	7174.22228	0.16700595	42.957884	308189.4087
LDT1	Aggregate	Aggregate	Gasoline	5069.633405	170757.054	6.80815243	25.08126182	4282802.372
LDT1	Aggregate	Aggregate	Diesel	3.501354481	34.7539132	0.00139527	24.90834765	865.6625522
LDT2	Aggregate	Aggregate	Gasoline	21254.48517	854850.794	35.0573471	24.38435488	20844985.13
LDT2	Aggregate	Aggregate	Diesel	115.3900653	4748.01481	0.14749804	32.1903589	152840.3009
LHDT1	Aggregate	Aggregate	Gasoline	2395.611844	86148.498	9.30312013	9.26017258	797749.9589
LHDT1	Aggregate	Aggregate	Diesel	2187.053408	78688.2797	5.01235136	15.69887544	1235317.501
LHDT2	Aggregate	Aggregate	Gasoline	291.6371216	10311.5516	1.26035956	8.181436429	84363.30408
LHDT2	Aggregate	Aggregate	Diesel	821.8112539	30953.5281	2.39577613	12.92004195	399920.8816
MCY	Aggregate	Aggregate	Gasoline	2609.804763	14545.1065	0.35425008	41.05886635	597205.5856
MDV	Aggregate	Aggregate	Gasoline	15249.57291	558918.723	28.2627254	19.77582541	11053079.08
MDV	Aggregate	Aggregate	Diesel	343.8534099	13488.3448	0.54906027	24.56623698	331357.8747
MH	Aggregate	Aggregate	Gasoline	313.0516462	2903.49229	0.65724408	4.417677383	12826.6922
MH	Aggregate	Aggregate	Diesel	144.0264234	1391.86158	0.14817836	9.393150155	13073.96485
MHDT	Aggregate	Aggregate	Gasoline	139.79548	6876.24404	1.47087054	4.674948506	32146.0868
MHDT	Aggregate	Aggregate	Diesel	1349.660741	56881.5651	6.71769218	8.467426559	481640.4755
OBUS	Aggregate	Aggregate	Gasoline	87.66652257	5288.80413	1.10550938	4.784042727	25301.86494
OBUS	Aggregate	Aggregate	Diesel	71.08400862	5240.16605	0.72781155	7.199894044	37728.64033
SBUS	Aggregate	Aggregate	Gasoline	9.443288962	585.698136	0.05844137	10.02197846	5869.854102
SBUS	Aggregate	Aggregate	Diesel	98.19668763	2252.70559	0.27786964	8.107059121	18262.81742
UBUS	Aggregate	Aggregate	Gasoline	31.74615772	2052.17285	0.31133123	6.591606177	13527.11524
UBUS	Aggregate	Aggregate	Diesel	21.61735013	3517.60672	0.41062397	8.566491431	30133.54778
							Vehicles	
							Sum of VMT*FE	93,059,372
							Total VMT	3,716,910
							Weighted Average FE	25.03675674 miles/gallon

Total VMT

Source: AQ/GHG Appendix, CalEEMod Output

Browns Valley Subdivision - Operations Only - Napa County, Annual

Date: 7/21/2022 11:24 AM

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Single Family Housing	103.84	104.94	94.05	266,874	266,874
Total	103.84	104.94	94.05	266,874	266,874

	Annual VMT	Fuel	
	(miles)	Consumption	
Total VMT	266,874	10,659	gallons per year

Operation Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Browns Valley Subdivision - Operations Only - Napa County, Annual

Date: 7/21/2022 11:24 AM

Project Electricity Use

Land Use	Electricity Use
Parking Lot	15,703 kWh/yr
Single Family Housing	86,165 kWh/yr
Total	101,868 kWh/yr

kWh/yr = kilowatt-hours per year

Health Risk Assessment Project Construction DPM Emissions (Phases 1 and 2 Development)

Annual Construction Emissions (tons/year)

Construction Activity		PM2.5 (Exhaust)
	on site	0.00082
	off site	0.00006
Demolition		0.00088
	on site	0.00025
	off site	0.00000
Site Preparation		0.00025
	on site	0.00172
	off site	0.00013
Grading		0.00013
	on site	0.00021
	off site	0.00000
Paving		0.00021
	on site	0.00048
	off site	0.00012
Building Construction		0.00060
	on site	0.00025
	off site	0.00000
Architectural Coating		0.00025
	on site	0.00373
	off site	0.00031
Total On site		0.00373
Total Off site		0.00031
Total Construction Emissions		0.00404

Exhaust PM2.5 AERMOD & HARP2 Inputs

Construction Hours	1,232 (8 hours/day, 154 workdays)
Elapsed Hours	5,174 (24 hours/day, 216 calendar days)
Variable Factor	4.20
On-Site Emissions	7.46000 lbs/year 0.00144 lbs/hours
Off-Site Emissions	0.62000 lbs/year 0.00012 lbs/hour

Mitigation Applied	Mitigation Description

Model File: 3552.0021 Browns Valley Subdivision - P1 - Napa County, Annual
Timestamp: Date: 7/21/2022 11:14 AM

Model File: 3552.0021 Browns Valley Subdivision - P2 - Napa County, Annual
Timestamp: Date: 7/21/2022 10:23 AM

Off-Site AERMOD & HARP2 Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	PM _{2.5} (Exhaust) Annual Emissions (lbs)	PM _{2.5} (Exhaust) Emission Rate (lbs/hr)
Browns Valley Road	0.4	100.00%	0.016686	0.000003
Totals	0.4	100.00%	0.016686	0.000003

Notes:
² Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Phase Name	Days	Daily Vendor Truck Trips	Total Vendor Truck Trips	Total Hauling Truck Trips	Vendor Trip Length	Hauling Trip Length
Demolition	10	-	-	56	7.3	20.0
Site Preparation	2	-	-	-	7.3	20.0
Grading	8	-	-	128	7.3	20.0
Paving	2	-	-	-	7.3	20.0
Building Construction	125	1	125	-	7.3	20.0
Architectural Coating	7	-	-	-	7.3	20.0
Totals			125	184		

Diesel-Fueled Vehicle Results		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	125.00	912.50
Hauling Trucks	184	3,680
Total VMT		4,593

AERMOD 1,000-ft Radius Adjustment		
	Total Vehicle Trips	Vehicle Miles Traveled (VMT)
Vendor Trucks	125.00	50.00
Hauling Trucks	184	74
Total VMT		123.60

Proportion of off-site emissions occurring within 1,000 feet of project site: 2.6913%

**Project Construction DPM Emissions
(Phase 3 Development)**

Annual Construction Emissions (tons/year)

Construction Activity	PM2.5 (Exhaust)
on site	0.00039
off site	0.00009
Building Construction	0.00048
on site	0.00015
off site	0.00000
Architectural Coating	0.00015
Total On site	0.00054
Total Off site	0.00009
Total Construction Emissions	0.00063

Exhaust PM2.5 AERMOD & HARP2 Inputs

Construction Hours	880 (8 hours/day, 110 workdays)
Elapsed Hours	3,696 (24 hours/day, 154 calendar days)
Variable Factor	4.20
On-Site Emissions	1.08000 lbs/year 0.00029 lbs/hours
Off-Site Emissions	0.18000 lbs/year 0.00005 lbs/hour

Mitigation Applied	Mitigation Description

Model File: 3552.0021 Browns Valley Subdivision - P3 - Napa County, Annual
Timestamp: Date: 7/22/2022 8:24 AM

Off-Site AERMOD & HARP2 Input Adjustments

Roadway Segment	Length (Miles)	Proportion of Total	PM _{2.5} (Exhaust) Annual Emissions (lbs)	PM _{2.5} (Exhaust) Emission Rate (lbs/hr)
Browns Valley Road	0.4	100.00%	0.009863	0.000003
Totals	0.4	100.00%	0.009863	0.000003

Notes:
* Off-site emissions used in the AERMOD air dispersion model were reduced to account for the proportion of emissions occurring within 1,000 feet of the project site

Off-Site Emission Adjustment for 1,000-foot Radius of Project Site

Phase Name	Days	Daily Vendor Truck Trips	Total Vendor Truck Trips	Total Hauling Truck Trips	Vendor Trip Length	Hauling Trip Length
Building Construction	105	1	105	-	7.3	20.0
Architectural Coating	5	-	-	-	7.3	20.0
Totals			105	-		

Diesel-Fueled Vehicle Results	
	Vehicle Miles Traveled (VMT)
Total Vehicle Trips	
Vendor Trucks	105.00
Hauling Trucks	-
Total VMT	767

AERMOD 1,000-ft Radius Adjustment	
	Vehicle Miles Traveled (VMT)
Total Vehicle Trips	
Vendor Trucks	105.00
Hauling Trucks	-
Total VMT	42.00

Proportion of off-site emissions occurring within 1,000 feet of project site: 5.4795%

HARP2 Calculation Results - Sorted by Cumulative Risk (Off-Site Receptors)

Receptors		UTM Coordinates		Phases 1 & 2 Cancer Risk		Phase 3 Cancer Risk		Cumulative
REC No.	REC ID	X	Y	HARP2 INH_RISK	Cancer Risk (per million)	HARP2 INH_RISK	Cancer Risk (per million)	Cancer Risk (per million)
15	R-015	559678.39	4239625.68	1.26E-06	1.26	1.55E-07	0.16	1.41
13	R-013	559639.77	4239642.46	1.22E-06	1.22	1.51E-07	0.15	1.37
12	R-012	559618.29	4239651.67	1.21E-06	1.21	1.49E-07	0.15	1.36
14	R-014	559659.98	4239636.51	1.16E-06	1.16	1.44E-07	0.14	1.31
3	R-003	559436.3	4239727.56	1.16E-06	1.16	1.44E-07	0.14	1.31
16	R-016	559702.75	4239619.54	1.15E-06	1.15	1.42E-07	0.14	1.29
5	R-005	559422.04	4239742.13	9.31E-07	0.93	1.15E-07	0.12	1.05
4	R-004	559441.67	4239738.6	8.65E-07	0.87	1.07E-07	0.11	0.97
6	R-006	559401.03	4239753.02	8.22E-07	0.82	1.02E-07	0.10	0.92
8	R-008	559382.62	4239763.45	6.53E-07	0.65	8.09E-08	0.08	0.73
1	R-001	559477.12	4239743.41	6.18E-07	0.62	7.69E-08	0.08	0.69
7	R-007	559416.37	4239766.67	5.64E-07	0.56	6.99E-08	0.07	0.63
192	DC-192	559706.09	4239571.84	5.31E-07	0.53	6.56E-08	0.07	0.60
17	R-017	559641.39	4239691.55	5.11E-07	0.51	6.33E-08	0.06	0.57
257	DC-257	559704.21	4239567.41	5.07E-07	0.51	6.27E-08	0.06	0.57
196	DC-196	559710.38	4239570.07	4.92E-07	0.49	6.09E-08	0.06	0.55
197	DC-197	559714.66	4239568.3	4.66E-07	0.47	5.76E-08	0.06	0.52
9	R-009	559362.16	4239770.09	4.59E-07	0.46	5.68E-08	0.06	0.52
198	DC-198	559718.95	4239566.54	4.55E-07	0.46	5.63E-08	0.06	0.51
199	DC-199	559723.23	4239564.77	4.09E-07	0.41	5.06E-08	0.05	0.46
256	DC-256	559702.32	4239562.98	4.01E-07	0.40	4.96E-08	0.05	0.45
203	DC-203	559740.38	4239557.7	3.92E-07	0.39	4.85E-08	0.05	0.44
2	R-002	559483.26	4239771.73	3.89E-07	0.39	4.86E-08	0.05	0.44
18	R-018	559647.89	4239711.95	3.88E-07	0.39	4.81E-08	0.05	0.44
200	DC-200	559727.52	4239563	3.78E-07	0.38	4.67E-08	0.05	0.42
201	DC-201	559731.81	4239561.23	3.52E-07	0.35	4.36E-08	0.04	0.40
204	DC-204	559744.66	4239555.93	3.38E-07	0.34	4.18E-08	0.04	0.38
255	DC-255	559700.44	4239558.55	3.30E-07	0.33	4.08E-08	0.04	0.37
19	R-019	559657.64	4239730.54	3.09E-07	0.31	3.84E-08	0.04	0.35
202	DC-202	559736.09	4239559.46	2.96E-07	0.30	3.65E-08	0.04	0.33
193	DC-193	559748.95	4239554.16	2.83E-07	0.28	3.50E-08	0.03	0.32
254	DC-254	559698.56	4239554.12	2.79E-07	0.28	3.45E-08	0.03	0.31
21	R-021	559617.93	4239760.69	2.70E-07	0.27	3.40E-08	0.03	0.30
20	R-020	559663.8	4239752.41	2.50E-07	0.25	3.11E-08	0.03	0.28
205	DC-205	559747.12	4239549.71	2.42E-07	0.24	3.00E-08	0.03	0.27
253	DC-253	559696.67	4239549.69	2.42E-07	0.24	2.99E-08	0.03	0.27
206	DC-206	559745.3	4239545.26	2.14E-07	0.21	2.65E-08	0.03	0.24
252	DC-252	559694.79	4239545.26	2.13E-07	0.21	2.63E-08	0.03	0.24
22	R-022	559673.19	4239776.47	2.02E-07	0.20	2.52E-08	0.03	0.23
24	R-024	559501.26	4239824.6	1.98E-07	0.20	2.46E-08	0.02	0.22
207	DC-207	559743.47	4239540.82	1.93E-07	0.19	2.38E-08	0.02	0.22
251	DC-251	559692.91	4239540.84	1.90E-07	0.19	2.35E-08	0.02	0.21
208	DC-208	559741.65	4239536.37	1.75E-07	0.18	2.17E-08	0.02	0.20
250	DC-250	559691.03	4239536.41	1.72E-07	0.17	2.12E-08	0.02	0.19
23	R-023	559697.43	4239791.04	1.71E-07	0.17	2.13E-08	0.02	0.19
10	R-010	559330.26	4239767.48	1.66E-07	0.17	2.07E-08	0.02	0.19

209	DC-209	559739.82	4239531.92	1.60E-07	0.16	1.98E-08	0.02	0.18
249	DC-249	559689.14	4239531.98	1.56E-07	0.16	1.93E-08	0.02	0.18
210	DC-210	559738	4239527.47	1.48E-07	0.15	1.82E-08	0.02	0.17
248	DC-248	559687.26	4239527.55	1.43E-07	0.14	1.77E-08	0.02	0.16
211	DC-211	559736.17	4239523.02	1.37E-07	0.14	1.69E-08	0.02	0.15
247	DC-247	559685.38	4239523.12	1.32E-07	0.13	1.63E-08	0.02	0.15
212	DC-212	559734.35	4239518.57	1.27E-07	0.13	1.57E-08	0.02	0.14
246	DC-246	559683.49	4239518.69	1.21E-07	0.12	1.50E-08	0.01	0.14
213	DC-213	559732.52	4239514.13	1.19E-07	0.12	1.47E-08	0.01	0.13
28	R-028	559638.64	4239877.01	1.18E-07	0.12	1.48E-08	0.01	0.13
29	R-029	559666.81	4239870.27	1.16E-07	0.12	1.45E-08	0.01	0.13
27	R-027	559579.44	4239894.2	1.15E-07	0.11	1.43E-08	0.01	0.13
245	DC-245	559681.61	4239514.26	1.11E-07	0.11	1.38E-08	0.01	0.13
214	DC-214	559730.7	4239509.68	1.11E-07	0.11	1.38E-08	0.01	0.12
26	R-026	559567.36	4239900.07	1.10E-07	0.11	1.38E-08	0.01	0.12
30	R-030	559690.28	4239874.6	1.08E-07	0.11	1.35E-08	0.01	0.12
215	DC-215	559728.87	4239505.23	1.05E-07	0.10	1.29E-08	0.01	0.12
244	DC-244	559679.73	4239509.83	1.02E-07	0.10	1.26E-08	0.01	0.11
216	DC-216	559727.05	4239500.78	9.87E-08	0.10	1.22E-08	0.01	0.11
25	R-025	559550.28	4239918.25	9.61E-08	0.10	1.20E-08	0.01	0.11
243	DC-243	559677.84	4239505.4	9.41E-08	0.09	1.17E-08	0.01	0.11
217	DC-217	559725.22	4239496.33	9.35E-08	0.09	1.16E-08	0.01	0.11
218	DC-218	559723.4	4239491.88	8.88E-08	0.09	1.10E-08	0.01	0.10
242	DC-242	559675.96	4239500.97	8.68E-08	0.09	1.07E-08	0.01	0.10
219	DC-219	559721.57	4239487.44	8.44E-08	0.08	1.05E-08	0.01	0.09
241	DC-241	559674.08	4239496.54	8.07E-08	0.08	1.00E-08	0.01	0.09
220	DC-220	559719.75	4239482.99	8.04E-08	0.08	9.96E-09	0.01	0.09
11	R-011	559324.21	4239675.28	7.73E-08	0.08	9.59E-09	0.01	0.09
221	DC-221	559717.92	4239478.54	7.68E-08	0.08	9.50E-09	0.01	0.09
240	DC-240	559672.2	4239492.12	7.52E-08	0.08	9.32E-09	0.01	0.08
222	DC-222	559716.1	4239474.09	7.33E-08	0.07	9.08E-09	0.01	0.08
239	DC-239	559670.31	4239487.69	7.04E-08	0.07	8.72E-09	0.01	0.08
223	DC-223	559714.27	4239469.64	7.02E-08	0.07	8.69E-09	0.01	0.08
224	DC-224	559712.45	4239465.2	6.72E-08	0.07	8.32E-09	0.01	0.08
238	DC-238	559668.43	4239483.26	6.59E-08	0.07	8.17E-09	0.01	0.07
225	DC-225	559710.62	4239460.75	6.43E-08	0.06	7.96E-09	0.01	0.07
237	DC-237	559666.55	4239478.83	6.19E-08	0.06	7.67E-09	0.01	0.07
226	DC-226	559708.8	4239456.3	6.15E-08	0.06	7.62E-09	0.01	0.07
229	DC-229	559693.71	4239457.29	6.03E-08	0.06	7.47E-09	0.01	0.07
228	DC-228	559698.13	4239455.47	6.02E-08	0.06	7.45E-09	0.01	0.07
230	DC-230	559689.29	4239459.1	6.01E-08	0.06	7.44E-09	0.01	0.07
227	DC-227	559702.55	4239453.66	5.97E-08	0.06	7.39E-09	0.01	0.07
231	DC-231	559684.88	4239460.91	5.96E-08	0.06	7.38E-09	0.01	0.07
194	DC-194	559706.97	4239451.85	5.88E-08	0.06	7.29E-09	0.01	0.07
232	DC-232	559680.46	4239462.72	5.88E-08	0.06	7.29E-09	0.01	0.07
236	DC-236	559664.66	4239474.4	5.81E-08	0.06	7.20E-09	0.01	0.07
233	DC-233	559676.04	4239464.53	5.77E-08	0.06	7.15E-09	0.01	0.06
234	DC-234	559671.62	4239466.35	5.67E-08	0.06	7.03E-09	0.01	0.06
235	DC-235	559667.2	4239468.16	5.57E-08	0.06	6.90E-09	0.01	0.06
195	DC-195	559662.78	4239469.97	5.48E-08	0.05	6.79E-09	0.01	0.06
34	ES-034	559748.83	4240149.7	3.35E-08	0.03	4.18E-09	0.00	0.04
141	ES-141	559753.56	4240150.86	3.33E-08	0.03	4.16E-09	0.00	0.04
140	ES-140	559758.29	4240152.02	3.31E-08	0.03	4.14E-09	0.00	0.04

142	ES-142	559747.62	4240154.53	3.30E-08	0.03	4.12E-09	0.00	0.04
139	ES-139	559763.02	4240153.18	3.29E-08	0.03	4.11E-09	0.00	0.04
138	ES-138	559767.75	4240154.35	3.27E-08	0.03	4.09E-09	0.00	0.04
137	ES-137	559772.49	4240155.51	3.25E-08	0.03	4.06E-09	0.00	0.04
143	ES-143	559746.42	4240159.35	3.24E-08	0.03	4.05E-09	0.00	0.04
136	ES-136	559777.22	4240156.67	3.23E-08	0.03	4.04E-09	0.00	0.04
135	ES-135	559781.95	4240157.83	3.21E-08	0.03	4.01E-09	0.00	0.04
144	ES-144	559745.21	4240164.17	3.19E-08	0.03	3.99E-09	0.00	0.04
134	ES-134	559786.68	4240158.99	3.19E-08	0.03	3.98E-09	0.00	0.04
133	ES-133	559791.41	4240160.16	3.17E-08	0.03	3.95E-09	0.00	0.04
132	ES-132	559796.14	4240161.32	3.15E-08	0.03	3.93E-09	0.00	0.04
145	ES-145	559744	4240169	3.14E-08	0.03	3.92E-09	0.00	0.04
131	ES-131	559800.87	4240162.48	3.12E-08	0.03	3.90E-09	0.00	0.04
130	ES-130	559805.6	4240163.64	3.10E-08	0.03	3.87E-09	0.00	0.03
146	ES-146	559742.8	4240173.83	3.09E-08	0.03	3.86E-09	0.00	0.03
129	ES-129	559810.33	4240164.8	3.08E-08	0.03	3.84E-09	0.00	0.03
128	ES-128	559815.06	4240165.96	3.05E-08	0.03	3.81E-09	0.00	0.03
147	ES-147	559741.59	4240178.65	3.04E-08	0.03	3.80E-09	0.00	0.03
127	ES-127	559819.8	4240167.13	3.03E-08	0.03	3.77E-09	0.00	0.03
126	ES-126	559824.53	4240168.29	3.00E-08	0.03	3.74E-09	0.00	0.03
148	ES-148	559740.39	4240183.48	2.99E-08	0.03	3.74E-09	0.00	0.03
125	ES-125	559829.26	4240169.45	2.98E-08	0.03	3.71E-09	0.00	0.03
124	ES-124	559833.99	4240170.61	2.95E-08	0.03	3.68E-09	0.00	0.03
149	ES-149	559739.18	4240188.3	2.95E-08	0.03	3.68E-09	0.00	0.03
123	ES-123	559838.72	4240171.77	2.92E-08	0.03	3.64E-09	0.00	0.03
150	ES-150	559737.97	4240193.13	2.90E-08	0.03	3.62E-09	0.00	0.03
122	ES-122	559843.45	4240172.93	2.90E-08	0.03	3.61E-09	0.00	0.03
121	ES-121	559848.18	4240174.1	2.87E-08	0.03	3.58E-09	0.00	0.03
151	ES-151	559736.77	4240197.95	2.85E-08	0.03	3.56E-09	0.00	0.03
120	ES-120	559852.91	4240175.26	2.84E-08	0.03	3.54E-09	0.00	0.03
119	ES-119	559857.64	4240176.42	2.81E-08	0.03	3.51E-09	0.00	0.03
152	ES-152	559735.56	4240202.78	2.81E-08	0.03	3.51E-09	0.00	0.03
118	ES-118	559862.37	4240177.58	2.79E-08	0.03	3.47E-09	0.00	0.03
153	ES-153	559734.35	4240207.6	2.76E-08	0.03	3.45E-09	0.00	0.03
117	ES-117	559867.11	4240178.74	2.76E-08	0.03	3.44E-09	0.00	0.03
116	ES-116	559871.84	4240179.91	2.73E-08	0.03	3.40E-09	0.00	0.03
154	ES-154	559733.15	4240212.43	2.72E-08	0.03	3.39E-09	0.00	0.03
115	ES-115	559876.57	4240181.07	2.70E-08	0.03	3.37E-09	0.00	0.03
155	ES-155	559731.94	4240217.25	2.67E-08	0.03	3.34E-09	0.00	0.03
114	ES-114	559881.3	4240182.23	2.67E-08	0.03	3.33E-09	0.00	0.03
33	ES-033	559886.03	4240183.39	2.64E-08	0.03	3.29E-09	0.00	0.03
156	ES-156	559730.74	4240222.08	2.63E-08	0.03	3.28E-09	0.00	0.03
113	ES-113	559884.98	4240188.24	2.62E-08	0.03	3.26E-09	0.00	0.03
112	ES-112	559883.92	4240193.1	2.59E-08	0.03	3.23E-09	0.00	0.03
157	ES-157	559729.53	4240226.9	2.59E-08	0.03	3.23E-09	0.00	0.03
111	ES-111	559882.87	4240197.95	2.57E-08	0.03	3.20E-09	0.00	0.03
158	ES-158	559728.32	4240231.73	2.54E-08	0.03	3.18E-09	0.00	0.03
110	ES-110	559881.82	4240202.8	2.54E-08	0.03	3.17E-09	0.00	0.03
109	ES-109	559880.76	4240207.66	2.52E-08	0.03	3.13E-09	0.00	0.03
159	ES-159	559727.12	4240236.55	2.50E-08	0.03	3.13E-09	0.00	0.03
108	ES-108	559879.71	4240212.51	2.49E-08	0.02	3.10E-09	0.00	0.03
107	ES-107	559878.66	4240217.37	2.46E-08	0.02	3.07E-09	0.00	0.03
160	ES-160	559725.91	4240241.38	2.46E-08	0.02	3.07E-09	0.00	0.03

106	ES-106	559877.6	4240222.22	2.44E-08	0.02	3.04E-09	0.00	0.03
161	ES-161	559724.7	4240246.2	2.42E-08	0.02	3.02E-09	0.00	0.03
105	ES-105	559876.55	4240227.07	2.41E-08	0.02	3.01E-09	0.00	0.03
104	ES-104	559875.5	4240231.93	2.39E-08	0.02	2.98E-09	0.00	0.03
162	ES-162	559723.5	4240251.03	2.38E-08	0.02	2.98E-09	0.00	0.03
103	ES-103	559874.45	4240236.78	2.36E-08	0.02	2.95E-09	0.00	0.03
163	ES-163	559722.29	4240255.85	2.34E-08	0.02	2.93E-09	0.00	0.03
102	ES-102	559873.39	4240241.63	2.34E-08	0.02	2.92E-09	0.00	0.03
101	ES-101	559872.34	4240246.49	2.31E-08	0.02	2.88E-09	0.00	0.03
164	ES-164	559721.09	4240260.68	2.30E-08	0.02	2.88E-09	0.00	0.03
100	ES-100	559871.29	4240251.34	2.29E-08	0.02	2.85E-09	0.00	0.03
165	ES-165	559719.88	4240265.5	2.27E-08	0.02	2.83E-09	0.00	0.03
99	ES-099	559870.23	4240256.2	2.27E-08	0.02	2.82E-09	0.00	0.03
98	ES-098	559869.18	4240261.05	2.24E-08	0.02	2.79E-09	0.00	0.03
166	ES-166	559718.67	4240270.33	2.23E-08	0.02	2.78E-09	0.00	0.03
97	ES-097	559868.13	4240265.9	2.22E-08	0.02	2.76E-09	0.00	0.02
167	ES-167	559717.47	4240275.15	2.19E-08	0.02	2.74E-09	0.00	0.02
96	ES-096	559867.07	4240270.76	2.19E-08	0.02	2.73E-09	0.00	0.02
95	ES-095	559866.02	4240275.61	2.17E-08	0.02	2.70E-09	0.00	0.02
168	ES-168	559716.26	4240279.98	2.16E-08	0.02	2.69E-09	0.00	0.02
94	ES-094	559864.97	4240280.46	2.15E-08	0.02	2.67E-09	0.00	0.02
93	ES-093	559863.91	4240285.32	2.12E-08	0.02	2.65E-09	0.00	0.02
169	ES-169	559715.05	4240284.8	2.12E-08	0.02	2.65E-09	0.00	0.02
92	ES-092	559862.86	4240290.17	2.10E-08	0.02	2.62E-09	0.00	0.02
170	ES-170	559713.85	4240289.63	2.09E-08	0.02	2.60E-09	0.00	0.02
91	ES-091	559861.81	4240295.03	2.08E-08	0.02	2.59E-09	0.00	0.02
90	ES-090	559860.75	4240299.88	2.05E-08	0.02	2.56E-09	0.00	0.02
171	ES-171	559712.64	4240294.45	2.05E-08	0.02	2.56E-09	0.00	0.02
89	ES-089	559859.7	4240304.73	2.03E-08	0.02	2.53E-09	0.00	0.02
172	ES-172	559711.44	4240299.28	2.02E-08	0.02	2.52E-09	0.00	0.02
88	ES-088	559858.65	4240309.59	2.01E-08	0.02	2.50E-09	0.00	0.02
173	ES-173	559710.23	4240304.1	1.98E-08	0.02	2.48E-09	0.00	0.02
87	ES-087	559857.6	4240314.44	1.98E-08	0.02	2.47E-09	0.00	0.02
86	ES-086	559856.54	4240319.29	1.96E-08	0.02	2.45E-09	0.00	0.02
174	ES-174	559709.02	4240308.93	1.95E-08	0.02	2.44E-09	0.00	0.02
85	ES-085	559855.49	4240324.15	1.94E-08	0.02	2.42E-09	0.00	0.02
175	ES-175	559707.82	4240313.75	1.92E-08	0.02	2.39E-09	0.00	0.02
84	ES-084	559854.44	4240329	1.92E-08	0.02	2.39E-09	0.00	0.02
83	ES-083	559853.38	4240333.86	1.89E-08	0.02	2.36E-09	0.00	0.02
176	ES-176	559706.61	4240318.58	1.89E-08	0.02	2.35E-09	0.00	0.02
82	ES-082	559852.33	4240338.71	1.87E-08	0.02	2.34E-09	0.00	0.02
177	ES-177	559705.4	4240323.4	1.85E-08	0.02	2.31E-09	0.00	0.02
81	ES-081	559851.28	4240343.56	1.85E-08	0.02	2.31E-09	0.00	0.02
80	ES-080	559850.22	4240348.42	1.83E-08	0.02	2.28E-09	0.00	0.02
178	ES-178	559704.2	4240328.23	1.82E-08	0.02	2.28E-09	0.00	0.02
79	ES-079	559849.17	4240353.27	1.81E-08	0.02	2.26E-09	0.00	0.02
179	ES-179	559702.99	4240333.05	1.79E-08	0.02	2.24E-09	0.00	0.02
78	ES-078	559848.12	4240358.12	1.79E-08	0.02	2.23E-09	0.00	0.02
77	ES-077	559847.06	4240362.98	1.77E-08	0.02	2.20E-09	0.00	0.02
180	ES-180	559701.79	4240337.88	1.76E-08	0.02	2.20E-09	0.00	0.02
76	ES-076	559846.01	4240367.83	1.75E-08	0.02	2.18E-09	0.00	0.02
181	ES-181	559700.58	4240342.7	1.73E-08	0.02	2.16E-09	0.00	0.02
75	ES-075	559844.96	4240372.68	1.73E-08	0.02	2.15E-09	0.00	0.02

74 ES-074	559843.9	4240377.54	1.71E-08	0.02	2.13E-09	0.00	0.02
182 ES-182	559699.37	4240347.53	1.70E-08	0.02	2.13E-09	0.00	0.02
73 ES-073	559842.85	4240382.39	1.69E-08	0.02	2.10E-09	0.00	0.02
183 ES-183	559698.17	4240352.35	1.68E-08	0.02	2.09E-09	0.00	0.02
72 ES-072	559841.8	4240387.25	1.67E-08	0.02	2.08E-09	0.00	0.02
184 ES-184	559696.96	4240357.18	1.65E-08	0.02	2.06E-09	0.00	0.02
71 ES-071	559840.75	4240392.1	1.65E-08	0.02	2.05E-09	0.00	0.02
70 ES-070	559839.69	4240396.95	1.63E-08	0.02	2.03E-09	0.00	0.02
185 ES-185	559695.75	4240362	1.62E-08	0.02	2.02E-09	0.00	0.02
69 ES-069	559838.64	4240401.81	1.61E-08	0.02	2.00E-09	0.00	0.02
186 ES-186	559694.55	4240366.83	1.59E-08	0.02	1.99E-09	0.00	0.02
68 ES-068	559837.59	4240406.66	1.59E-08	0.02	1.98E-09	0.00	0.02
67 ES-067	559836.53	4240411.51	1.57E-08	0.02	1.96E-09	0.00	0.02
187 ES-187	559693.34	4240371.66	1.57E-08	0.02	1.95E-09	0.00	0.02
66 ES-066	559835.48	4240416.37	1.55E-08	0.02	1.93E-09	0.00	0.02
188 ES-188	559692.14	4240376.48	1.54E-08	0.02	1.92E-09	0.00	0.02
65 ES-065	559834.43	4240421.22	1.53E-08	0.02	1.91E-09	0.00	0.02
189 ES-189	559690.93	4240381.3	1.51E-08	0.02	1.89E-09	0.00	0.02
64 ES-064	559833.37	4240426.08	1.51E-08	0.02	1.89E-09	0.00	0.02
54 ES-054	559783.98	4240419.21	1.51E-08	0.02	1.88E-09	0.00	0.02
55 ES-055	559788.82	4240420.38	1.51E-08	0.02	1.88E-09	0.00	0.02
53 ES-053	559779.15	4240418.04	1.51E-08	0.02	1.88E-09	0.00	0.02
56 ES-056	559793.65	4240421.56	1.51E-08	0.02	1.88E-09	0.00	0.02
52 ES-052	559774.32	4240416.87	1.51E-08	0.02	1.88E-09	0.00	0.02
57 ES-057	559798.48	4240422.73	1.51E-08	0.02	1.88E-09	0.00	0.02
51 ES-051	559769.48	4240415.7	1.51E-08	0.02	1.88E-09	0.00	0.02
58 ES-058	559803.32	4240423.9	1.51E-08	0.02	1.88E-09	0.00	0.02
50 ES-050	559764.65	4240414.53	1.51E-08	0.02	1.88E-09	0.00	0.02
59 ES-059	559808.15	4240425.07	1.51E-08	0.02	1.88E-09	0.00	0.02
49 ES-049	559759.81	4240413.36	1.50E-08	0.02	1.88E-09	0.00	0.02
60 ES-060	559812.99	4240426.24	1.50E-08	0.02	1.88E-09	0.00	0.02
48 ES-048	559754.98	4240412.18	1.50E-08	0.02	1.87E-09	0.00	0.02
61 ES-061	559817.82	4240427.42	1.50E-08	0.02	1.87E-09	0.00	0.02
62 ES-062	559822.65	4240428.59	1.50E-08	0.01	1.87E-09	0.00	0.02
47 ES-047	559750.15	4240411.01	1.50E-08	0.01	1.87E-09	0.00	0.02
63 ES-063	559827.49	4240429.76	1.50E-08	0.01	1.87E-09	0.00	0.02
46 ES-046	559745.31	4240409.84	1.50E-08	0.01	1.87E-09	0.00	0.02
32 ES-032	559832.32	4240430.93	1.49E-08	0.01	1.86E-09	0.00	0.02
45 ES-045	559740.48	4240408.67	1.49E-08	0.01	1.86E-09	0.00	0.02
44 ES-044	559735.65	4240407.5	1.49E-08	0.01	1.86E-09	0.00	0.02
190 ES-190	559689.72	4240386.13	1.49E-08	0.01	1.86E-09	0.00	0.02
43 ES-043	559730.81	4240406.33	1.49E-08	0.01	1.86E-09	0.00	0.02
42 ES-042	559725.98	4240405.15	1.48E-08	0.01	1.85E-09	0.00	0.02
41 ES-041	559721.15	4240403.98	1.48E-08	0.01	1.84E-09	0.00	0.02
40 ES-040	559716.31	4240402.81	1.47E-08	0.01	1.84E-09	0.00	0.02
39 ES-039	559711.48	4240401.64	1.47E-08	0.01	1.83E-09	0.00	0.02
38 ES-038	559706.64	4240400.47	1.46E-08	0.01	1.83E-09	0.00	0.02
191 ES-191	559688.52	4240390.96	1.46E-08	0.01	1.82E-09	0.00	0.02
37 ES-037	559701.81	4240399.29	1.46E-08	0.01	1.82E-09	0.00	0.02
36 ES-036	559696.98	4240398.12	1.45E-08	0.01	1.81E-09	0.00	0.02
35 ES-035	559692.14	4240396.95	1.44E-08	0.01	1.80E-09	0.00	0.02
31 ES-031	559687.31	4240395.78	1.44E-08	0.01	1.79E-09	0.00	0.02

HARP2 Calculation Results - Sorted by Cumulative Risk (On-Site Receptors)

Receptors		UTM Coordinates		Phases 1 & 2 Cancer Risk		Phase 3 Cancer Risk		Cumulative
REC No.	REC ID	X	Y	HARP2 INH_RISK	Cancer Risk (per million)	HARP2 INH_RISK	Cancer Risk (per million)	Cancer Risk (per million)
259	OR-259	559570.59	4239790.43	-	0.00	3.27E-08	0.03	0.03
258	OR-258	559538.66	4239803.39	-	0.00	3.11E-08	0.03	0.03
260	OR-260	559586.67	4239822.35	-	0.00	2.35E-08	0.02	0.02
262	OR-262	559571.79	4239857.64	-	0.00	1.85E-08	0.02	0.02
261	OR-261	559597.95	4239855.24	-	0.00	1.81E-08	0.02	0.02

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- **County:** Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- **Roadway Direction:** Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.
- **Side of the Roadway:** Identify on which side of the roadway the project is located.
- **Distance from Roadway:** Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.
- **Annual Average Daily Traffic (ADT):** Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Search Parameters	Results
County: <input type="text" value="Napa"/>	<p>Napa County</p> <p>EAST-WEST DIRECTIONAL ROADWAY</p> <p>PM2.5 annual average</p> <p>0.237 (µg/m³)</p> <p>Cancer Risk</p> <p>8.79 (per million)</p> <p>Data for Napa County based on meteorological data collected from Napa Sewage Treatment Plant in 2005</p>
Roadway Direction: <input type="text" value="East-West"/>	
Side of the Roadway: <input type="text" value="North"/>	
Distance from Roadway: <input type="text" value="10"/> feet	
Annual Average Daily Traffic (ADT): <input type="text" value="12,111"/>	

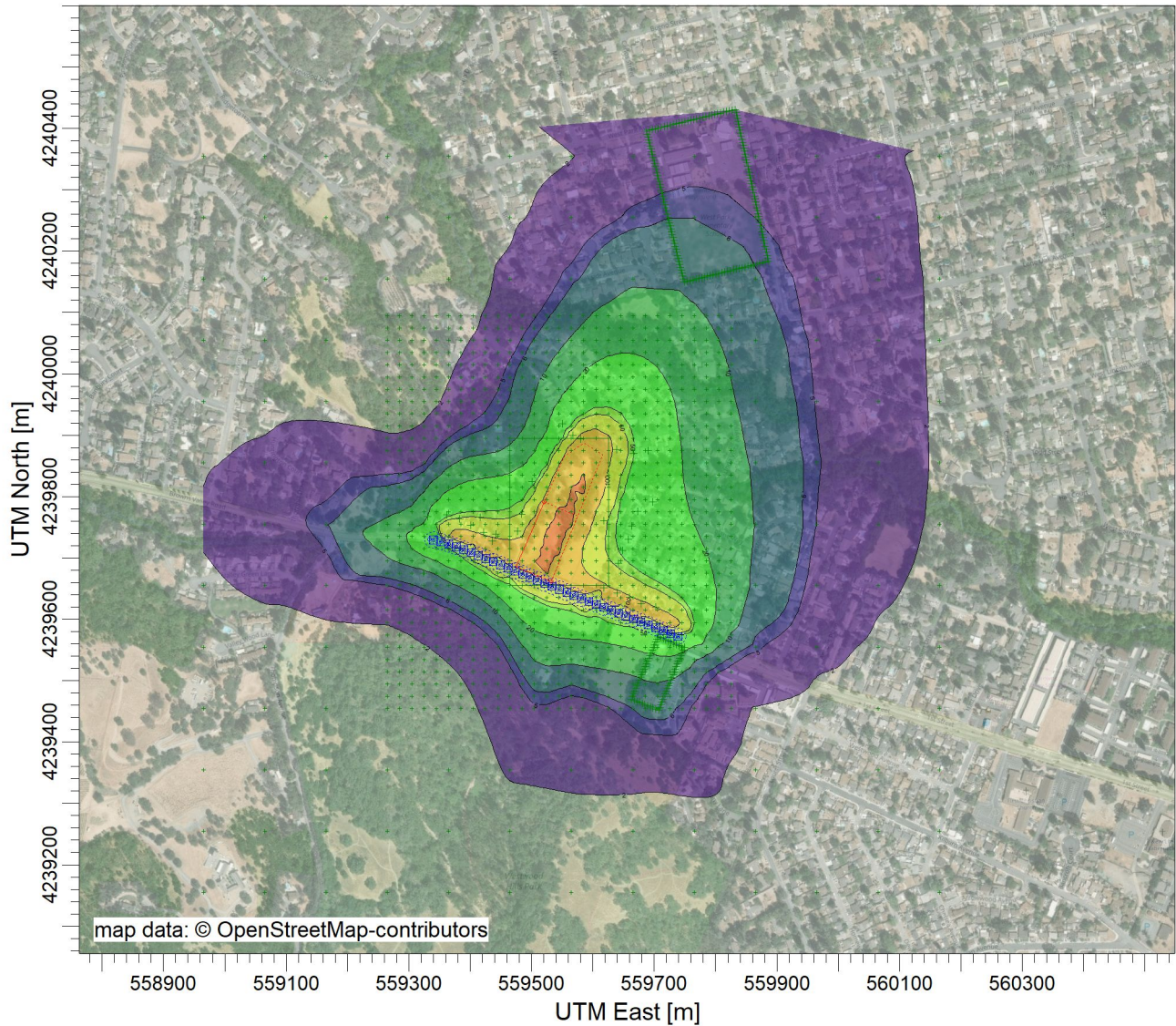
Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013.

Adjustment factor to account for updated OEHHA Guidance: 1.3744
Adjusted Cancer Risk: 12.08

PROJECT TITLE:

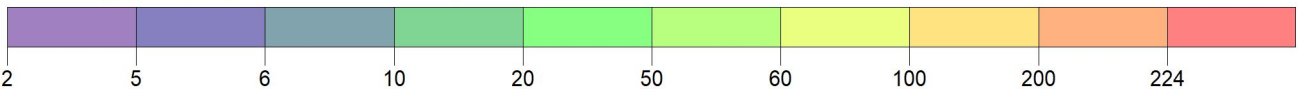
**Browns Valley Construction
Phase 1**




PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL

ug/m³

Max: 224 [ug/m³] at (559544.99, 4239754.80)



COMMENTS:	SOURCES: 3	COMPANY NAME:	
	RECEPTORS: 1341	MODELER:	
	OUTPUT TYPE: Concentration	SCALE: 1:11,236 0  0.4 km	
	MAX: 224 ug/m³	DATE: 7/27/2022	PROJECT NO.:

PROJECT TITLE:

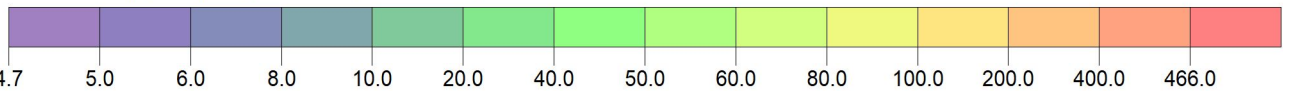
**Browns Valley Construction
Phase 3**



PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ALL

ug/m³

Max: 466.0 [ug/m³] at (559564.99, 4239754.80)



COMMENTS:	SOURCES: 3	COMPANY NAME:	
	RECEPTORS: 1346	MODELER:	
	OUTPUT TYPE: Concentration	SCALE: 1:10,679	
	MAX: 466.0 ug/m³	DATE: 7/27/2022	PROJECT NO.:

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