

# ***APPENDIX I***

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## ***AIR QUALITY MODELING OUTPUT FILES AND CALCULATION TABLES***

## *CALEEMOD INPUT FILES*

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# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative A

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria FTT and Casino Project – Alternative A	Project Description
Project Location	County	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Start of Construction	Date	July 1, 2019	Project Description
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore no population is associated with Alternative A.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See <b>Table 2.</b>	See <b>Table 2.</b>
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See <b>Table 2.</b>	See <b>Table 2.</b>
Dust From Material Movement	Export/Import of Material (Tons or Cubic Yards)	0	Section 2 of the EIS
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trips	Average number of one-way trips per day	--	---
Operational Trip Reductions	% reduction in trips.	See <b>Table 3.</b>	2017 KH Traffic Impact Analysis.



Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Table 3.</b>	See <b>Table 3.</b>
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	-	-
Energy Use	Project Specific Emission Factors.	See <b>Table 4.</b>	See <b>Table 4.</b>
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	1,292	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators/Fire Pumps	3 - 2,923 Horsepower	Based on like project emergency gen/set size and use.
	Generators/Fire Pumps EF	Default	Default
	Process Boilers	3 - 0.5 MMBtu/hr	Estimate from like projects
	Boilers EF	Default	Default
	User Defined	Default	Default
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Grassland Initial: 232 Acres Final: 139	Project Description
Sequestration	Type and net number of new trees added	--	--

Source: CalEEMod, 2016; EPA, 2017; Water and Wastewater Feasibility Study, Table 4.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Table 5.	See Table 5.
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	Assuming no increase over existing shuttle services
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	No	Emission Factor (EF) grams per liter (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	No	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	No	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	No	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	No	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water USE	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	No	% Reduction in Waste Disposal over State requirements	--	--

Source: AES, 2016; CalEEMod, 2016

**Table 1 – Land Use Inputs Alternative A**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Recreation (Casino)	User Defined	150.326	1,000 sq. ft.	4.25	150,326	0
Recreation	Movie Theater (Event Center and outdoor amphitheater)	3,300	seats	2.04	72,000	0
Recreation	Arena (Conference Center)	10.08	1,000 sq. ft.	0.29	10,080	0
Retail	Regional Shopping Center	130	1,000 sq. ft.	3.68	130,000	0
Recreational	Hotel	250	rooms	5.02	177,367	0
Parking	Enclosed Parking Structure	1,650	spaces	16.51	583,500	0
Parking/Water/Wastewater	Parking Lot	600	spaces	60.98	--	0
Total				92.76	1,123,273	

Notes: Population based on daily trips provided by Kimley-Horn. Event center includes 1,800 seats from the Event Cent and 1,500 seats from the outdoor Amphitheatre.

Source: Table 2-1, Section 2 of the EIS.

**Table 2 – Construction Equipment Usage**

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 8/31/2019	9/1/2019 - 11/30/2019	12/1/2019 - 12/15/2020	5/1/2020 - 8/15/2020	3/15/2020 - 12/31/2020
All Construction Equipment	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Notes: Construction phase timing based on similar projects. Total time of construction from Project Description.

### Table 3 - Trip Generation Rates

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Casino	33.67	33.67	9.50	9.50	25.00	19.0	19.40	61.60	90	10
Events Center	0.23	0.23	9.50	9.50	25.00	1.80	79.20	19.00	100	0
Convention Center	67.01	67.01	9.50	9.50	25.00	0.00	81.00	19.00	100	0
Hotel	2.04	2.04	9.50	9.50	25.00	19.40	61.60	19.00	100	0
Retail	22.52	22.52	9.50	9.50	25.00	16.30	64.70	19.00	90	10

Notes: Kimley-Horn TIS, 2018.

Event and convention center 30 percent trip generation reduction implemented because facilities are anticipated to operate less than 256 days per year.

### Table 4 – Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
All Land Uses	--	13.768	--	--	0.131

Notes: All other land uses energy is input under Casino the land use.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 1,123,273 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 1,123,273 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provided in the DEIS, Section 2, Table 2-1.

### Table 5 – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3
Scrapers	No Change	Default	No Change

### Table 6 – Water Use

Land Use Type	Indoor Water Demand (gallons per year)	Outdoor Water Demand (gallons per year)
Hotel	17,178,053	891,479
Casino	33,042,489	1,714,786
Events Center	11,317,305	587,327
Conference Center	4,698,703	243,846
Outdoor Sports Retail	10,559,450	547,997
<b>Total</b>	<b>76,796,000</b>	<b>3,985,435</b>

Notes: Based on Redding Rancheria Wastewater Management and Drinking Water Feasibility Study.  
Outdoor water demand based on Table 4 (landscape irrigation) and distributed to land uses based on indoor water demand percentages of the total indoor water demand.

### CalEEMod Mitigation Measures

- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.



# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative B

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria FTT and Casino Project – Alternative B	Project Description
Project Location	Air Quality District/ Air Basin	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Start of Construction	Date	July 1, 2019	Project Description
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore not population is associated with Alternative B.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	Alt B- 18 Months starting 6/1/2019	Project Description
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See <b>Table 2.</b>	See <b>Table 2.</b>
Dust From Material Movement	Export/Import of Material (Tons or Cubic Yards)	0	Section 2 of the EIS
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	See <b>Table 3.</b>	2018 KH Traffic Impact Analysis.

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Tables 3.</b>	See <b>Tables 3.</b>
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	See <b>Table 4.</b>	See <b>Table 4.</b>
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	1,234	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators/Fire Pumps	3 - 2,923 Horsepower	Estimate from like projects
	Generators/Fire Pumps EF	Default	Default
	Process Boilers	3 - 0.5 MMBtu/hr	Estimate from like projects
	Boilers EF	Default	Default
	User Defined	--	--
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Grassland Initial: 232 Acres Final: 158	Project Description
Sequestration	Type and net number of new trees added	--	--

Source: CalEEMod, 2016; EPA, 2017; Water and Wastewater Feasibility Study, Table 4.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Table 5.	See Table 5.
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	--
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	No	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	Yes	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal over State requirements	25	--

Source: AES, 2016; CalEEMod, 2016.

**Table 1 – Land Use Inputs Alternative B**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
User Defined	Casino	150.326	1,000 sq. ft.	3.39	150,326	0
Recreation	Movie Theater (Event Center and outdoor amphitheater)	3,300	seats	1.62	72,000	0
Recreation	Arena (Conference Center)	10.08	1,000 sq. ft.	0.23	10,080	0
Recreational	Hotel	250	rooms	3.99	177,367	0
Parking	Enclosed Parking Structure	1,650	spaces	13.14	583,500	0
Parking/Water/Wastewater	Parking Lot	600	spaces	51.82	--	0
Total				74.196	993,273	0

Notes: Population based on daily trips provided by Kimley-Horn. Event center includes 1,800 seats from the Event Center and 1,500 seats from the Outdoor Amphitheatre.

Source: Table 2-1, Section 2 of the EIS.

**Table 2 – Construction Equipment Usage**

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 8/31/2019	9/1/2019 - 11/30/2019	12/1/2019 - 12/15/2020	5/1/2020 - 8/15/2020	3/15/2020 - 12/31/2020
All Equipment	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Source: CalEEMod defaults used for equipment and phase time proportion. Total time from Project Description.



**Table 3 – Trip Generation Rates**

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (/size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Casino	33.67	33.67	9.50	9.50	25.00	19.0	19.4	61.6	90	10
Events Center	0.23	0.23	9.50	9.50	25.00	1.80	79.20	19.00	100	0
Convention Center	67.01	67.01	9.50	9.50	25.00	0.00	81.00	19.00	100	0
Hotel	2.04	2.04	9.50	9.50	25.00	19.40	61.60	19.00	100	0

Notes: Event and convention center 30 percent trip generation reduction implemented because facilities are anticipated to operate less than 256 days per year.  
Source: Kimley-Horn TIS, 2018.

**Table 4 – Energy Use**

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
All Land Uses	--	12.174	--	--	0.116

Notes: All other land uses utilize default energy.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 993,273 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 993,273 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

## Table 5 – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3
Scrapers	No Change	Default	No Change

## Table 6 – Water Use

Land Use Type	Indoor Water Demand (gallons per day)	Outdoor Water Demand (gallons per day)
Hotel	16,527,735	751,132
Casino	31,791,583	1,444,824
Events Center	10,888,860	494,863
Conference Center	4,520,822	205,457
<b>Total</b>	<b>63,729,000</b>	<b>2,896,275</b>

Notes: Based on Redding Rancheria Wastewater Management and Drinking Water Feasibility Study.  
Outdoor water demand based on Table 4 (landscape irrigation) and distributed to land uses based on indoor water demand percentages of the total indoor water demand.

## CalEEMod Mitigation Measures

- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.

# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative C

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria FTT and Casino Project - Alternative C	Project Description
Project Location	Air Quality District/ Air Basin	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Start of Construction	Date	July 1, 2019	Project Description
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore not population is associated with Alternative C.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	Alt C- 18 Months starting 6/1/2019	18 months of construction from project description
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See <b>Table 2.</b>	See <b>Table 2.</b>
Dust From Material Movement	Export/Import of Material (Tons or Cubic Yards)	0	Section 2 of the EIS
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	See <b>Table 3.</b>	2017 KH Traffic Impact Analysis.

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Table 3.</b>	See <b>Table 3.</b>
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	--	--
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	1,176	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators/Fire Pumps	3 - 2,923 Horsepower	Based on like project emergency gen/set size and use.
	Generators/Fire Pumps EF	Default	Default
	Process Boilers	3 - 0.5 MMBtu/hr	Estimate from like projects
	Boilers EF	Default	Default
	User Defined	Default	Default
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Grassland Initial: 232 Acres Final: 142	--
Sequestration	Type and net number of new trees added	--	--

Source: AES, 2016; EPA 2017; CalEEMod, 2016.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See <b>Table 4.</b>	See <b>Table 4.</b>
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	Assuming no increase over existing shuttle services
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	Yes	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	Yes	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults



Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal over State requirements	--	--

Source: AES, 2016; CalEEMod, 2016

**Table 1 – Land Use Inputs Alternative C**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
User Defined	Casino	129.095	1,000 sq. ft.	3.62	129,095	0
Recreation	Arena (Event Center and outdoor amphitheater)	3,300	seats	2.02	72,000	0
Recreation	Arena (Convention Center)	10.08	1,000 sq. ft.	0.28	10,080	0
Recreational	Hotel	250	rooms	5.28	188,368	0
Retail	Regional Shopping Center	130	1,000 sq. ft.	3.64	130,000	
Parking	Enclosed Parking Structure	1,650	spaces	16.36	583,500	0
Parking	Parking Lot	600	spaces	58.93	--	0
Total				90.132	1,113,043	0

Notes: Population based on daily trips and 1.7 person per trips.

Source: Table 2-1, Section 2 of the EIS; Kimbley Horn daily trip generation rates.

## Table 2 – Construction Equipment Usage

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 8/31/2019	9/1/2019 - 11/30/2019	12/1/2019 -1311 12/15/2020	5/1/2020 - 8/15/2020	3/15/2020 - 12/31/2020
All Equipment	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Source: CalEEMod defaults used for equipment and phase time proportion. Total time from Project Description.

## Table 3 - Trip Generation Rates

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (/size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Casino	21.26	21.26	9.50	9.50	25.00	19.00	19.40	61.60	90	10
Events Center	0.23	0.23	9.50	9.50	25.00	1.80	79.20	19.00	100	0
Convention Center	67.01	67.01	9.50	9.50	25.00	0.00	81.00	19.00	100	0
Hotel	2.04	2.04	9.50	9.50	25.00	19.40	61.60	19.00	100	0
Retail	22.52	22.52	9.50	9.50	25.00	16.30	64.70	19.00	90	10

Notes: Event and convention center 30 percent trip generation reduction implemented because facilities are anticipated to operate less than 256 days per year.

Source: Kimley-Horn TIS, 2018.

**Table 4 – Energy Use**

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
All Land Uses	--	13.64	--	--	0.130

Notes: All other land uses energy is input under Casino the land use.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 1,113,043 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 1,113,043 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

**Table 5 – Off-Road Equipment Mitigation Inputs**

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3
Scrapers	No Change	Default	No Change

## Table 6 – Water Use

Land Use Type	Indoor Water Demand (gallons per day)	Outdoor Water Demand (gallons per day)
Casino	17,823,049	938,402
Conference Center	1,391,660	73,272
Events Center	9,940,428	523,374
Hotel	26,006,368	1,369,262
Retail	17,947,995	944,980
<b>Total</b>	<b>73,109,500</b>	<b>3,849,290</b>

Notes: Based on Redding Rancheria Wastewater Management and Drinking Water Feasibility Study.  
Outdoor water demand based on Table 4 (landscape irrigation) and distributed to land uses based on indoor water demand percentages of the total indoor water demand.

## CalEEMod Mitigation Measures

- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day. 11
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.

# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative D

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria Fee-to-Trust and Casino Project - Alternative D	Project Description
Project Location	Air Quality District/ Air Basin	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore not population is associated with Alternative D.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	Alt D- 14 Months starting 6/1/2019	14 months of construction from project description
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See <b>Table 2.</b>	See <b>Table 2.</b>
Dust From Material Movement	Export/Import of Material (Tons or Cubic Yards)	0	Section 2 of the EIS
Dust From Material Movement	Export/Import of Material (Tons or Cubic Yards)	0	Section 2 of the EIS

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	See <b>Table 3.</b>	2017 KH Traffic Impact Analysis.
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Table 3.</b>	See <b>Table 3.</b>
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	--	--
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	112	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators/Fire Pumps	1 - 2,923 Horsepower	Based on like project emergency gen/set size and use.
	Generators/Fire Pumps EF	Default	Default
	Process Boilers	1- 0.5 MMBtu/hr	Estimate from like projects
	Boilers EF	Default	Default
	User Defined	Default	Default
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Grassland Initial: 232 Acres Final: 191	--



Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Sequestration	Type and net number of new trees added	--	--

Source: AES, 2016; EPA 2017; CalEEMod, 2016.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Table 4.	See Table 4.
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	Assuming no increase over existing shuttle services
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	Yes	Percent of equipment type that will be electric.	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Electric Chainsaw	A-1	Yes	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	Yes	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal over State requirements	--	--

Source: AES, 2016; CalEEMod, 2016

**Table 1 – Land Use Inputs Alternative D**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Retail	Regional Shopping Center	120	1,000 sq. ft.	7.69	120,000	0
Recreational	High Turnover Restaurant	99	Seats	0.31	4,867	0
Recreational	Quality Restaurant	66	Seats	0.21	3,245	0
Recreational	Hotel	128	rooms	6.83	106,544	0
Parking/Water/Wastewater	Parking Lot	200	Spaces	25.59	--	0

Notes: Population based on daily trips provided by Kimley-Horn.

Source: Table 2-1, Section 2 of the EIS.

**Table 2 – Construction Equipment Usage**

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 7/31/2019	8/1/2019 - 8/31/2019	9/1/2019 - 7/15/2020	4/1/2020 - 6/15/2020	3/15/2020 - 7/31/2020
All Equipment	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Source: CalEEMod defaults used for equipment and phase time proportion. Total time from Project Description.

**Table 3 – Trip Generation Rates**

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (/size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Regional Shopping Center	22.52	22.52	9.50	9.50	25.00	16.30	64.70	19.00	85	15
High Turnover Restaurant	98.21	98.21	9.50	9.50	25.00	8.50	72.50	19.00	85	15
Quality Restaurant	58.24	58.24	9.50	9.50	25.00	12.00	69.00	19.00	85	15
Hotel	8.17	8.17	9.50	9.50	25.00	19.40	61.60	19.00	85	15

**Table 4 – Energy Use**

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
All Land Uses	--	2.88	--	--	0.0274

Notes: All other land uses utilize default energy.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 234,656 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 234,656 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

**Table 5 – Off-Road Equipment Mitigation Inputs**

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3
Scrapers	No Change	Default	No Change

**Table 6 – Water Use**

Land Use Type	Indoor Water Demand (gallons per day)	Outdoor Water Demand (gallons per day)
Hotel	10,038,311	702,406
Quality Restaurant	3,454,360	241,710
High Turnover Restaurant	6,908,720	483,421
Outdoor Sports Retail	6,170,609	431,773
<b>Total</b>	<b>26,572,000</b>	<b>1,859,310</b>

## CalEEMod Mitigation Measures

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- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.



# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative E

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria Fee-to-Trust and Casino Project – Alternative E	Project Description
Project Location	Air Quality District/ Air Basin	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Start of Construction	Date	July 1, 2019	Project Description
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore not population is associated with Alternative E.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	See <b>Table 2.</b>	See <b>Table 2.</b>
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	See <b>Table 2.</b>	See <b>Table 2.</b>
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	See <b>Table 3.</b>	2017 KH Traffic Impact Analysis.
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Tables 3.</b>	See <b>Tables 3.</b>

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	See <b>Table 4.</b>	See <b>Table 4.</b>
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	1,288	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Stationary Sources	Emergency Generators/Fire Pumps	3 - 2,923 Horsepower	Based on like project emergency gen/set size and use.
	Generators/Fire Pumps EF	Default	Default
	Process Boilers	3 - 0.5 MMBtu/hr	Estimate from like projects
	Boilers EF	Default	Default
	User Defined	Default	Default
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	Grassland Initial: 55 Final: 25	--
Sequestration	Type and net number of new trees added	--	--

Source: CalEEMod, 2016; EPA, 2017; Water and Wastewater Feasibility Study, Table 4.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Table 5.	See Table 5.
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	Assuming no increase over existing shuttle services
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	Yes	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal over State requirements	--	--

Source: AES, 2016; CalEEMod, 2016.

**Table 1 – Land Use Inputs Alternative E**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
User Defined	Casino	150,326	1,000 sq. ft.	2.883	150,326	0
Recreation	Arena (Event Center and outdoor amphitheater)	3,300	seats	1.381	72,000	0
Recreation	Arena (Convention Center)	10.08	1,000 sq. ft.	0.193	10,080	0
Retail	Regional Shopping Center	120	1,000 sq. ft.	2.493	120,000	0
Recreational	Hotel	250	rooms	3.230	177,367	0
Parking	Enclosed Parking Structure	1,650	spaces	11.190	583,500	0
Parking	Parking Lot	600	spaces	3.835	--	0
Total				25.376	1,145,603	

Notes: Population based on daily trips provided by Kimley Horn. Event center includes 1,800 seats from the Event Cent and 1,500 seats from the outdoor Amphitheatre.

Source: Table 2-1, Section 2 of the EIS.

**Table 2 – Construction Equipment Usage**

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 8/31/2019	9/1/2019 - 11/30/2019	12/1/2019 - 12/15/2020	5/1/2020 - 8/15/2020	3/15/2020 - 12/31/2020
All Equipment	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Notes: Construction phase timing based on similar projects. Total time of construction from Project Description.13.



**Table 3 - Trip Generation Rates**

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Casino	33.67	33.67	9.50	9.50	25.00	19.00	19.40	61.60	90	10
Events Center	0.23	0.23	9.50	9.50	25.00	1.80	79.20	19.00	100	0
Convention Center	67.01	67.01	9.50	9.50	25.00	0.00	81.00	19.00	100	0
Hotel	2.04	2.04	9.50	9.50	25.00	19.40	61.60	19.00	100	0
Retail	22.52	22.52	9.50	9.50	25.00	16.30	64.70	19.00	90	10

**Table 4 – Energy Use**

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
Casino	--	13.58	--	--	0.129

Notes: All other land uses utilize default energy.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 1,107,773 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 1,107,773 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

### Table 5 – Off-Road Equipment Mitigation Inputs

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3
Scrapers	No Change	Default	No Change

### Table 6 – Water Use

Land Use Type	Indoor Water Demand (gallons per year)	Outdoor Water Demand (gallons per year)
Hotel	16,639,197	841,839
Casino	32,005,985	1,619,302
Events Center	10,962,295	554,623
Convention Center	4,551,310	230,268
Outdoor Sports Retail	10,228,213	517,483
<b>Total</b>	<b>74,387,000</b>	<b>3,763,515</b>

Notes: Based on Redding Rancheria Wastewater Management and Drinking Water Feasibility Study.  
Outdoor water demand based on Table 4 (landscape irrigation) and distributed to land uses based on indoor water demand percentages of the total indoor water demand.  
Outdoor water demand based on Table 4 (landscape irrigation) and distributed to land uses based on indoor water demand percentages of the total indoor water demand.

## CalEEMod Mitigation Measures

- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.

# CalEEMod Inputs

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Redding Rancheria Fee-to-Trust and Casino Project  
Alternative F

## Project-Specific Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Project Name	Project Name	Redding Rancheria Fee-to-Trust and Casino Project – Alternative E	Project Description
Project Location	Air Quality District/ Air Basin	Shasta County	Modeler, based on location
Climate zone	Climate Zone Number	3	Appendix F Climate Zones Lookup
Land Use Setting	Urban or Rural	Urban	Modeler, based on location
Start of Construction	Date	July 1, 2019	Project Description
Operational Year	1st year of operation after full buildout.	2025	Project Description
Utility Company	Utility Company Name	PG&E	Project is served by Redding Electrical Utility (REU) which is not included as a power provider in CalEEMod. PG&E is used in place because REU sells power into the PG&E grid and vice versa.
Land Use Type and Subtype	Residential, Commercial, Recreation, etc.	See <b>Table 1.</b>	See <b>Table 1.</b>
Unit Amount	Size of Buildings or Number of units for each Land Use Type.	See <b>Table 1.</b>	See <b>Table 1.</b>
Lot Acreage	Acreage of each Land Use Type	See <b>Table 1.</b>	See <b>Table 1.</b>
Population	Population based on persons/household	0	No residential units are proposed therefore not population is associated with Alternative E.
Construction Phases	Type of construction phase (Demo, Site Prep, etc.) and beginning and ending dates	--	--
Off-Road Equipment	Type of equipment (Excavator, Dozer, etc.) and number of units per construction phase	--	--
Demolition	Sq ft or tons of Demo	N/A	--
Construction Trip Gen Rate	Average number of one-way trips per day	--	--
Operational Trip Reductions	% reduction in trips.	See <b>Table 2.</b>	2017 KH Traffic Impact Analysis.
Operational Trip Gen Rate and trip length	Trips and trip lengths	See <b>Table 2.</b>	See <b>Tables 2.</b>

Input	Type of Input	Project Specific Inputs	
		Inputs	Source/Notes
Area Sources	Hearths – # of wood-burning fireplaces, #of gas fireplaces, and # of units with no fireplace.	Not Applicable	No hearths are included in the project design.
	Landscape Equipment - % of equipment that is electric.	--	--
Energy Use	Project Specific Emission Factors.	See <b>Table 4.</b>	See <b>Table 4.</b>
Water and Wastewater	Indoor and outdoor water use for each Land Use Subtype in gallons per year.	See <b>Table 6.</b>	Water and Wastewater Feasibility Study Table 4
Solid waste	Tons of solid waste generated per year	58	CalRecycle, 2017
	Land Fill Gas Capture Rate	94%	CARB Mandatory Reporting Regulation Guidance
Operational off-road equipment	Excavator, Dozer, etc.	--	--
Land Use Change	Vegetation land use type (cropland, etc.) and initial and final acreage	--	--
Sequestration	Type and net number of new trees added	--	--

Source: CalEEMod, 2016; EPA, 2017; Water and Wastewater Feasibility Study, Table 4.

## Project-Mitigation Inputs for the Redding Rancheria Fee-to-Trust and Casino Project

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Off-Road Equipment	C-1	Yes	Engine Type, DPF Level, and Oxidation Catalyst	See Table 3.	See Table 3.
Soil Stabilizer for Unpaved Roads	N/A	Yes	PM10 (% Reduction)	10%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	10%	Default % Reduction.
Water Exposed Area	N/A	Yes	Frequency (per day)	2 times per day	Default % Reduction
	N/A		PM10 (% Reduction)	55%	Default % Reduction.
	N/A		PM2.5 (% Reduction)	55%	Default % Reduction.
Replace Ground Cover of Area Disturbed	N/A	No	PM10 (% Reduction)	--	--
	N/A		PM2.5 (% Reduction)	--	--
Unpaved Road Mitigation	N/A	No	Moisture Content (%)	--	--
	N/A	Yes	Vehicle Speed (mph)	15 mph	Default Reduction
Type of Residential	N/A	No	Type of Residential	--	--
Increased Density	LUT-1	No	Dwelling Units/Acre	--	--
			Job/Job Acre	--	--
Increased Diversity	LUT-3	No	Yes or No	--	--
Improved Walkability Design	LUT-9	No	Intersections/Square Miles	--	--
Improve Destination Accessibility	LUT-4	No	Distance to Downtown/Job Ctr	--	--
Increased Transit Accessibility	LUT-5	No	Average Distance to Transit Station (miles)	--	--
Integrated Below Market Rate Housing	LUT-6	No	# Dwelling Units Below Market Rate	--	--
Improve Pedestrian Network	SDT-1	No	Yes or No; Project Site, Project Site and Connecting off-site, and Rural	--	--
Provide Traffic Calming Measures	SDT-2	No	% Streets with Improvement	--	--
		No	% Intersections with Improvement	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Implement Neighborhood Electric Vehicle (NEV) Network	SDT-3	No	% of streets equipped with NEV network.	--	--
Limit Parking Supply	PDT-1	No	% Reduction in Spaces	--	--
Unbundled Parking Costs	PDT-2	No	Monthly Parking Costs (\$)	--	--
On-Street Market Pricing	PDT-3	No	% Increase in Price	--	--
Provide a Bus Rapid Transit System	TST-1	No	% Lines BRT	--	Assuming no increase over existing shuttle services
Expand Transit Network	TST-3	Yes	% Increase Transit Coverage	--	--
Increase Transit Frequency	TST-4	No	Level of Implementation	--	--
		No	% Reduction in Headways	--	--
Implement Trip Reduction Program	TRT-1, TRT-2	No	% employee eligible	--	--
		No	Program Type	--	--
Transit Subsidy	TRT-4	No	% employee eligible	--	--
		No	Daily Transit Subsidy Amount (\$)	--	--
Implement Employee Parking "Cash-Out"	TRT-15	No	% employee eligible	--	--
Workplace Parking Charge	TRT-14	No	% employee eligible	--	--
		No	Daily Parking Charge (\$)	--	--
Encourage Telecommuting and Alternative Work Schedules	TRT-6	No	% employee work 9/80	--	--
		No	% employee work 4/40	--	--
		No	% employee telecommute 1.5 days	--	--
Market Commute Trip Reduction Option	TRT-7	No	% employee eligible	--	--

Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Employee Vanpool/Shuttle	TRT-11	Yes	% employee eligible	--	--
		Yes	% vanpool mode share	--	--
Provide Ride Sharing Program	TRT-3	No	% employee eligible	--	--
Implement School Bus Program	TRT-13	No	% family using	--	--
Only Natural Gas Hearth	N/A	No	Yes or No	--	--
No hearth	N/A	No	Yes or No	--	--
Use of Low VOC Cleaning Supplies	N/A	No	Yes or No	--	--
Use low VOC Paint (Residential Interior)	N/A	Yes	Emission Factor (EF) (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Interior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Use low VOC Paint (Non-residential Exterior)	N/A	Yes	EF (g/l)	150	SHAAQMD amendment to Rule 3:31 Architectural Coatings (based on Nonflat Coating)
Electric Lawnmower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Leafblower	A-1	Yes	Percent of equipment type that will be electric.	--	--
Electric Chainsaw	A-1	Yes	Percent of equipment type that will be electric.	--	--
Exceed Title 24	BE-1	No	Percentage improvement selected for the Project.	--	--
Install High Efficiently Lighting	LE-1	No	% Lighting Energy Reduction	--	--
On-site Renewable Energy	AE-1, AE-2, AE-3	No	kWh Generated	--	--
		No	% of Electricity Use Generated	--	--
Energy Efficient Appliances	BE-4	Yes	Appliance Type, Land Use Subtype, % Improvement	Use Default Values	Defaults



Mitigation Input Category	CAPCOA Mitigation Number	Include in Model? (yes/no)	Type of Input / Unit	Project Specific Inputs	
				Inputs	Source/Notes
Apply Water Conservation Strategy	WUW-2	No	% Reduction Indoor	--	--
		No	% Reduction Outdoor	--	--
Use Reclaimed Water	WSW-1	No	% Indoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
		No	% Outdoor Water Use	30%	Water and Wastewater Feasibility Study, Section 2.4.
Use Grey Water	WSW-2	No	% Indoor Water Use	--	--
		No	% Outdoor Water Use	--	--
Install Low-Flow Bathroom Faucet	WUW-1	Yes	% Reduction in flow	32%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Kitchen Faucet	WUW-1	Yes	% Reduction in flow	18%	Default % reduction assuming implementation of Recommended Mitigation.
Install Low-flow Toilet	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Install Low-flow Shower	WUW-1	Yes	% Reduction in flow	20%	Default % reduction assuming implementation of Recommended Mitigation
Turf Reduction	WUW-5	No	Turf Reduction Area (sqft)	--	--
		No	% Reduction turf	--	--
Use Water-Efficient Irrigation Systems	WUW-4	No	% Reduction	--	--
Water Efficient Landscape	WUW-3	No	Maximum Applied Water Allowance (MAWA) (gal/yr)	--	--
		No	Estimated Total Water Use (ETWU) (gal/yr)	--	--
Institute Recycling and Composting Service	SW-1	Yes	% Reduction in Waste Disposal over State requirements	--	--

Source: AES, 2016; CalEEMod, 2016

**Table 1 – Land Use Inputs Alternative F**

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet	Population
Recreation	User Defined	9.83	1000 sq. ft.	--	9,8260	0
Recreation	Arena (Event Center)	10	1000 sq. ft.	0.080	10,000	0
Parking	Enclosed Parking Structure	1,710	Spaces	4.81	604,500	0

**Table 2 – Construction Equipment Usage**

Equipment	Total No.	Construction Phase Activities				
		Site Preparation	Grading	Construction	Paving	Architectural Coating
	Construction Phasing	7/1/2019 - 7/10/2019	7/11/2019 - 7/31/2019	8/1/2019 - 2/14/2020	9/1/2019 - 2/15/2020	10/15/2019 - 2/28/2020
Air Compressors	Default	Default	Default	Default	Default	Default
Worker Trips (one-way trips)	--	Default	Default	Default	Default	Default

Notes: CalEEMod equipment use, construction phase timing, and worker trips based on similar projects. Total time from Project Description.

**Table 3 - Trip Generation Rates**

Land Use	Daily Trip Generation Rate		Trip Length (Miles)			Trip Percent			Primary Trip	Diverted
	Weekday (/size/day)	Saturday (size/day)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)	Work Trips (C-W)	Work to Project Trips (C-C)	Home to Project Trips (C-NW)		
Casino	192.98	192.98	9.50	7.30	7.30	19.0	19.4	61.6	66	3
Convention Center	0	0	9.50	7.30	7.30	0.00	81.00	19.00	100	0

**Table 4 – Energy Use**

Land Use Subtype	Title-24 Electricity Energy Intensity (KWhr/size/yr)	Nontitle-24 Electricity Energy Intensity (KWhr/size/yr)	Lighting Energy Intensity (KWhr/size/yr)	Title-24 Natural Gas Intensity (KBtu/size/yr)	Non-title-24 Natural Gas Intensity (KBtu/size/yr)
All Land Uses	--	0.243	--	--	0.00231

Notes: All other land uses utilize default energy.

Electricity energy use is determined by the following equation:  $15,465,000 \text{ kwh/yr} / 19,826 \text{ sqft} = 14.601 \text{ kwh/size/yr}$ . Kwh/yr was provided in an email from HBG Design on July 10, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

Natural gas use is determined by the following equation:  $(16,800 \text{ cf per hour} * 8,760 \text{ hours/yr} / 1,000) = 147,168 \text{ kcf/yr} / 19,826 \text{ sqft} = 0.139 \text{ kcf/size/yr}$ , cf was provided in an email from HBG Design on July 11, 2017 and the sqft is provide in the DEIS, Section 2, Table 2-1.

**Table 5 – Off-Road Equipment Mitigation Inputs**

Equipment Type	Engine Tier	Number of Equipment Mitigated	Diesel Particulate Filter (DPF) Level 2014
All Equipment	Tier 3	Default	Level 3

**Table 6 – Water Use**

Land Use Type	Indoor Water Demand (gallons per day)	Outdoor Water Demand (gallons per day)
Casino	18,834,000	0
Events Center	0	0
<b>Total</b>	18,834,000	0

## CalEEMod Mitigation Measures

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- The Tribe shall use Tier 3 construction equipment, using a minimum of 90 percent of the equipment's total horsepower.
- The Tribe shall apply soil stabilizer on unpaved roads
- The Tribe shall apply water to exposed construction areas twice a day.
- The Tribe shall restrict vehicle speeds on the construction site to 15 miles per hour.
- The Tribe shall use at minimum 30 percent recycled water.

## *CALEEMOD OUTPUT FILES*

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

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tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00



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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	2/5/2027	12/31/2020
tblConstructionPhase	PhaseEndDate	4/3/2026	12/15/2020
tblConstructionPhase	PhaseEndDate	4/24/2020	11/30/2019
tblConstructionPhase	PhaseEndDate	9/4/2026	8/15/2020
tblConstructionPhase	PhaseEndDate	9/20/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	9/5/2026	3/15/2020
tblConstructionPhase	PhaseStartDate	4/25/2020	12/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	4/4/2026	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.77
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,292.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40

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tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	61.60
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52

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tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,698,703.00
tblWater	IndoorWaterUseRate	6,341,692.50	17,178,053.00
tblWater	IndoorWaterUseRate	29,818,908.53	11,317,305.00
tblWater	IndoorWaterUseRate	9,629,427.79	10,559,450.00
tblWater	IndoorWaterUseRate	0.00	33,042,489.00
tblWater	OutdoorWaterUseRate	277,159.33	243,846.00
tblWater	OutdoorWaterUseRate	704,632.50	891,479.00
tblWater	OutdoorWaterUseRate	1,903,334.59	587,327.00
tblWater	OutdoorWaterUseRate	5,901,907.36	547,997.00
tblWater	OutdoorWaterUseRate	0.00	1,714,786.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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					
2019	0.3148	3.3079	2.0401	4.2000e-003	1.2719	0.1478	1.4197	0.5923	0.1363	0.7286	0.0000	379.8249	379.8249	0.0943	0.0000	382.1812
2020	4.2044	5.9748	5.4594	0.0159	0.6373	0.1982	0.8355	0.1730	0.1867	0.3597	0.0000	1,446.5642	1,446.5642	0.1614	0.0000	1,450.5996
Maximum	4.2044	5.9748	5.4594	0.0159	1.2719	0.1982	1.4197	0.5923	0.1867	0.7286	0.0000	1,446.5642	1,446.5642	0.1614	0.0000	1,450.5996

**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					
2019	0.1601	2.2094	2.1757	4.2000e-003	0.6041	0.0436	0.6477	0.2752	0.0409	0.3160	0.0000	379.8245	379.8245	0.0943	0.0000	382.1808
2020	3.9743	5.2154	5.6881	0.0159	0.6373	0.0403	0.6776	0.1730	0.0394	0.2124	0.0000	1,446.5637	1,446.5637	0.1614	0.0000	1,450.5991
Maximum	3.9743	5.2154	5.6881	0.0159	0.6373	0.0436	0.6776	0.2752	0.0409	0.3160	0.0000	1,446.5637	1,446.5637	0.1614	0.0000	1,450.5991

	ROG	NOx	CO	SO2	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	8.51	20.02	-4.86	0.00	34.98	75.75	41.23	41.44	75.16	51.45	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.7456	0.9230
2	10-1-2019	12-31-2019	1.8677	1.4472
3	1-1-2020	3-31-2020	1.7371	1.5258
4	4-1-2020	6-30-2020	3.0434	2.7409
5	7-1-2020	9-30-2020	2.9781	2.6923
		Highest	3.0434	2.7409

## 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	2.2403	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	603.1470	603.1470	0.0273	5.6500e-003	605.5124
Mobile	3.7092	32.7921	43.9981	0.2182	15.7000	0.1694	15.8694	4.2230	0.1591	4.3821	0.0000	20,193.5592	20,193.5592	0.8508	0.0000	20,214.8286
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	262.2643	0.0000	262.2643	15.4994	0.0000	649.7488
Water						0.0000	0.0000		0.0000	0.0000	24.3638	124.9442	149.3080	2.5081	0.0603	229.9655
<b>Total</b>	<b>6.0282</b>	<b>33.1444</b>	<b>44.7961</b>	<b>0.2223</b>	<b>15.7000</b>	<b>0.2250</b>	<b>15.9250</b>	<b>4.2230</b>	<b>0.2147</b>	<b>4.4377</b>	<b>286.6282</b>	<b>21,643.0069</b>	<b>21,929.6350</b>	<b>18.9020</b>	<b>0.0659</b>	<b>22,421.8250</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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	2.2403	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	603.1470	603.1470	0.0273	5.6500e-003	605.5124
Mobile	3.7092	32.7921	43.9981	0.2182	15.7000	0.1694	15.8694	4.2230	0.1591	4.3821	0.0000	20,193.5592	20,193.5592	0.8508	0.0000	20,214.8286
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	262.2643	0.0000	262.2643	15.4994	0.0000	649.7488
Water						0.0000	0.0000		0.0000	0.0000	17.1521	88.6749	105.8271	1.7657	0.0424	162.6127
<b>Total</b>	<b>6.0282</b>	<b>33.1444</b>	<b>44.7961</b>	<b>0.2223</b>	<b>15.7000</b>	<b>0.2250</b>	<b>15.9250</b>	<b>4.2230</b>	<b>0.2147</b>	<b>4.4377</b>	<b>279.4165</b>	<b>21,606.7376</b>	<b>21,886.1540</b>	<b>18.1596</b>	<b>0.0481</b>	<b>22,354.4722</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.52</b>	<b>0.17</b>	<b>0.20</b>	<b>3.93</b>	<b>27.05</b>	<b>0.30</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-400.8300
<b>Total</b>	<b>-400.8300</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 387.5****Acres of Paving: 77.49**

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**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 712,460; Non-Residential Outdoor: 237,487; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	432.00	173.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.5420	0.0000	0.5420	0.2979	0.0000	0.2979	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0975	1.0254	0.4964	8.5000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0975</b>	<b>1.0254</b>	<b>0.4964</b>	<b>8.5000e-004</b>	<b>0.5420</b>	<b>0.0538</b>	<b>0.5958</b>	<b>0.2979</b>	<b>0.0495</b>	<b>0.3474</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**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					0.2439	0.0000	0.2439	0.1341	0.0000	0.1341	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.4290	0.5166	8.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0210</b>	<b>0.4290</b>	<b>0.5166</b>	<b>8.5000e-004</b>	<b>0.2439</b>	<b>3.1900e-003</b>	<b>0.2471</b>	<b>0.1341</b>	<b>3.1900e-003</b>	<b>0.1373</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

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**3.2 Site Preparation - 2019****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	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6722	0.0000	0.6722	0.2787	0.0000	0.2787	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e-003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
<b>Total</b>	<b>0.1540</b>	<b>1.7719</b>	<b>1.0847</b>	<b>2.0200e-003</b>	<b>0.6722</b>	<b>0.0774</b>	<b>0.7496</b>	<b>0.2787</b>	<b>0.0712</b>	<b>0.3500</b>	<b>0.0000</b>	<b>181.0293</b>	<b>181.0293</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4612</b>

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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**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					0.3025	0.0000	0.3025	0.1254	0.0000	0.1254	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0945	1.3452	1.1924	2.0200e-003		0.0366	0.0366		0.0339	0.0339	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
<b>Total</b>	<b>0.0945</b>	<b>1.3452</b>	<b>1.1924</b>	<b>2.0200e-003</b>	<b>0.3025</b>	<b>0.0366</b>	<b>0.3390</b>	<b>0.1254</b>	<b>0.0339</b>	<b>0.1594</b>	<b>0.0000</b>	<b>181.0291</b>	<b>181.0291</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4610</b>

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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2319	0.1888	3.0000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	25.8615	25.8615	6.3000e-003	0.0000	26.0190
<b>Total</b>	<b>0.0260</b>	<b>0.2319</b>	<b>0.1888</b>	<b>3.0000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0133</b>	<b>0.0133</b>	<b>0.0000</b>	<b>25.8615</b>	<b>25.8615</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0190</b>

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**3.4 Building Construction - 2019****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	0.0103	0.2565	0.0597	5.6000e-004	0.0124	2.0200e-003	0.0144	3.5900e-003	1.9300e-003	5.5100e-003	0.0000	52.6613	52.6613	4.6400e-003	0.0000	52.7773
Worker	0.0221	0.0182	0.1722	3.9000e-004	0.0371	2.9000e-004	0.0374	9.8900e-003	2.7000e-004	0.0102	0.0000	35.5097	35.5097	1.4000e-003	0.0000	35.5447
<b>Total</b>	<b>0.0323</b>	<b>0.2747</b>	<b>0.2319</b>	<b>9.5000e-004</b>	<b>0.0495</b>	<b>2.3100e-003</b>	<b>0.0518</b>	<b>0.0135</b>	<b>2.2000e-003</b>	<b>0.0157</b>	<b>0.0000</b>	<b>88.1710</b>	<b>88.1710</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>88.3220</b>

**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	7.4100e-003	0.1565	0.1966	3.0000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	25.8614	25.8614	6.3000e-003	0.0000	26.0189
<b>Total</b>	<b>7.4100e-003</b>	<b>0.1565</b>	<b>0.1966</b>	<b>3.0000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>25.8614</b>	<b>25.8614</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0189</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.4 Building Construction - 2019****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	0.0103	0.2565	0.0597	5.6000e-004	0.0124	2.0200e-003	0.0144	3.5900e-003	1.9300e-003	5.5100e-003	0.0000	52.6613	52.6613	4.6400e-003	0.0000	52.7773
Worker	0.0221	0.0182	0.1722	3.9000e-004	0.0371	2.9000e-004	0.0374	9.8900e-003	2.7000e-004	0.0102	0.0000	35.5097	35.5097	1.4000e-003	0.0000	35.5447
<b>Total</b>	<b>0.0323</b>	<b>0.2747</b>	<b>0.2319</b>	<b>9.5000e-004</b>	<b>0.0495</b>	<b>2.3100e-003</b>	<b>0.0518</b>	<b>0.0135</b>	<b>2.2000e-003</b>	<b>0.0157</b>	<b>0.0000</b>	<b>88.1710</b>	<b>88.1710</b>	<b>6.0400e-003</b>	<b>0.0000</b>	<b>88.3220</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2650	2.3983	2.1061	3.3600e-003		0.1396	0.1396		0.1313	0.1313	0.0000	289.5125	289.5125	0.0706	0.0000	291.2783
<b>Total</b>	<b>0.2650</b>	<b>2.3983</b>	<b>2.1061</b>	<b>3.3600e-003</b>		<b>0.1396</b>	<b>0.1396</b>		<b>0.1313</b>	<b>0.1313</b>	<b>0.0000</b>	<b>289.5125</b>	<b>289.5125</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2783</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0943	2.6540	0.5895	6.2700e-003	0.1407	0.0147	0.1554	0.0408	0.0140	0.0548	0.0000	594.3358	594.3358	0.0482	0.0000	595.5405
Worker	0.2247	0.1802	1.7126	4.3300e-003	0.4219	3.1600e-003	0.4251	0.1124	2.9100e-003	0.1153	0.0000	390.7684	390.7684	0.0135	0.0000	391.1065
<b>Total</b>	<b>0.3189</b>	<b>2.8342</b>	<b>2.3021</b>	<b>0.0106</b>	<b>0.5626</b>	<b>0.0178</b>	<b>0.5805</b>	<b>0.1531</b>	<b>0.0169</b>	<b>0.1701</b>	<b>0.0000</b>	<b>985.1042</b>	<b>985.1042</b>	<b>0.0617</b>	<b>0.0000</b>	<b>986.6470</b>

**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	0.0842	1.7783	2.2342	3.3600e-003		0.0169	0.0169		0.0169	0.0169	0.0000	289.5121	289.5121	0.0706	0.0000	291.2779
<b>Total</b>	<b>0.0842</b>	<b>1.7783</b>	<b>2.2342</b>	<b>3.3600e-003</b>		<b>0.0169</b>	<b>0.0169</b>		<b>0.0169</b>	<b>0.0169</b>	<b>0.0000</b>	<b>289.5121</b>	<b>289.5121</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2779</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0943	2.6540	0.5895	6.2700e-003	0.1407	0.0147	0.1554	0.0408	0.0140	0.0548	0.0000	594.3358	594.3358	0.0482	0.0000	595.5405
Worker	0.2247	0.1802	1.7126	4.3300e-003	0.4219	3.1600e-003	0.4251	0.1124	2.9100e-003	0.1153	0.0000	390.7684	390.7684	0.0135	0.0000	391.1065
<b>Total</b>	<b>0.3189</b>	<b>2.8342</b>	<b>2.3021</b>	<b>0.0106</b>	<b>0.5626</b>	<b>0.0178</b>	<b>0.5805</b>	<b>0.1531</b>	<b>0.0169</b>	<b>0.1701</b>	<b>0.0000</b>	<b>985.1042</b>	<b>985.1042</b>	<b>0.0617</b>	<b>0.0000</b>	<b>986.6470</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.5345	0.5568	8.7000e-004		0.0286	0.0286		0.0263	0.0263	0.0000	76.1072	76.1072	0.0246	0.0000	76.7226
Paving	0.0799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1314</b>	<b>0.5345</b>	<b>0.5568</b>	<b>8.7000e-004</b>		<b>0.0286</b>	<b>0.0286</b>		<b>0.0263</b>	<b>0.0263</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7226</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**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	0.0213	0.4292	0.6572	8.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	76.1072	76.1072	0.0246	0.0000	76.7225
Paving	0.0799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1012</b>	<b>0.4292</b>	<b>0.6572</b>	<b>8.7000e-004</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7225</b>

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**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.4240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0253	0.1760	0.1914	3.1000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7332
<b>Total</b>	<b>3.4493</b>	<b>0.1760</b>	<b>0.1914</b>	<b>3.1000e-004</b>		<b>0.0116</b>	<b>0.0116</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7332</b>

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**3.6 Architectural Coating - 2020****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	0.0374	0.0300	0.2850	7.2000e-004	0.0702	5.3000e-004	0.0708	0.0187	4.8000e-004	0.0192	0.0000	65.0340	65.0340	2.2500e-003	0.0000	65.0903
<b>Total</b>	<b>0.0374</b>	<b>0.0300</b>	<b>0.2850</b>	<b>7.2000e-004</b>	<b>0.0702</b>	<b>5.3000e-004</b>	<b>0.0708</b>	<b>0.0187</b>	<b>4.8000e-004</b>	<b>0.0192</b>	<b>0.0000</b>	<b>65.0340</b>	<b>65.0340</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>65.0903</b>

**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	3.4240					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2100e-003	0.1418	0.1915	3.1000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7331
<b>Total</b>	<b>3.4302</b>	<b>0.1418</b>	<b>0.1915</b>	<b>3.1000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7331</b>

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**3.6 Architectural Coating - 2020****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	0.0374	0.0300	0.2850	7.2000e-004	0.0702	5.3000e-004	0.0708	0.0187	4.8000e-004	0.0192	0.0000	65.0340	65.0340	2.2500e-003	0.0000	65.0903
<b>Total</b>	<b>0.0374</b>	<b>0.0300</b>	<b>0.2850</b>	<b>7.2000e-004</b>	<b>0.0702</b>	<b>5.3000e-004</b>	<b>0.0708</b>	<b>0.0187</b>	<b>4.8000e-004</b>	<b>0.0192</b>	<b>0.0000</b>	<b>65.0340</b>	<b>65.0340</b>	<b>2.2500e-003</b>	<b>0.0000</b>	<b>65.0903</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	3.7092	32.7921	43.9981	0.2182	15.7000	0.1694	15.8694	4.2230	0.1591	4.3821	0.0000	20,193.55 92	20,193.55 92	0.8508	0.0000	20,214.82 86
Unmitigated	3.7092	32.7921	43.9981	0.2182	15.7000	0.1694	15.8694	4.2230	0.1591	4.3821	0.0000	20,193.55 92	20,193.55 92	0.8508	0.0000	20,214.82 86

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	5,061.61	5,061.61	5,061.61	21,209,322	21,209,322
Total	9,933.67	9,933.67	9,933.67	42,285,013	42,285,013

## 4.3 Trip Type Information



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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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	61.60	19.40	19.00	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	602.0961	602.0961	0.0272	5.6300e-003	604.4553
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	602.0961	602.0961	0.0272	5.6300e-003	604.4553
NaturalGas Mitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0509	1.0509	2.0000e-005	2.0000e-005	1.0571
NaturalGas Unmitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0509	1.0509	2.0000e-005	2.0000e-005	1.0571

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19692.7	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0509	1.0509	2.0000e-005	2.0000e-005	1.0571
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0509</b>	<b>1.0509</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0571</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19692.7	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0509	1.0509	2.0000e-005	2.0000e-005	1.0571
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0509</b>	<b>1.0509</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0571</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.06969e+006	602.0961	0.0272	5.6300e-003	604.4553
<b>Total</b>		<b>602.0961</b>	<b>0.0272</b>	<b>5.6300e-003</b>	<b>604.4553</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.06969e+006	602.0961	0.0272	5.6300e-003	604.4553
<b>Total</b>		<b>602.0961</b>	<b>0.0272</b>	<b>5.6300e-003</b>	<b>604.4553</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	2.2403	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159
Unmitigated	2.2403	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159

## 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	0.3424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1400e-003	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159
<b>Total</b>	<b>2.2403</b>	<b>5.1000e-004</b>	<b>0.0558</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1088</b>	<b>0.1088</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1159</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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	0.3424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1400e-003	5.1000e-004	0.0558	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1159
<b>Total</b>	<b>2.2403</b>	<b>5.1000e-004</b>	<b>0.0558</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1088</b>	<b>0.1088</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1159</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	105.8271	1.7657	0.0424	162.6127
Unmitigated	149.3080	2.5081	0.0603	229.9655

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.6987 / 0.243846	9.1353	0.1535	3.6900e-003	14.0703
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	17.1781 / 0.891479	33.3979	0.5610	0.0135	51.4397
Movie Theater (No Matinee)	11.3173 / 0.587327	22.0033	0.3696	8.8800e-003	33.8897
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.5595 / 0.547997	20.5299	0.3449	8.2900e-003	31.6203
User Defined Recreational	33.0425 / 1.71479	64.2417	1.0791	0.0259	98.9457
<b>Total</b>		<b>149.3080</b>	<b>2.5081</b>	<b>0.0603</b>	<b>229.9655</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.30789 / 0.214584	6.4750	0.1080	2.6000e-003	9.9493
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	12.0933 / 0.784502	23.6718	0.3950	9.4900e-003	36.3739
Movie Theater (No Matinee)	7.96738 / 0.516848	15.5956	0.2602	6.2500e-003	23.9640
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.43385 / 0.482237	14.5512	0.2428	5.8300e-003	22.3593
User Defined Recreational	23.2619 / 1.50901	45.5335	0.7597	0.0183	69.9663
<b>Total</b>		<b>105.8271</b>	<b>1.7657</b>	<b>0.0424</b>	<b>162.6127</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	262.2643	15.4994	0.0000	649.7488
Unmitigated	262.2643	15.4994	0.0000	649.7488

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1292	262.2643	15.4994	0.0000	649.7488
<b>Total</b>		<b>262.2643</b>	<b>15.4994</b>	<b>0.0000</b>	<b>649.7488</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1292	262.2643	15.4994	0.0000	649.7488
<b>Total</b>		<b>262.2643</b>	<b>15.4994</b>	<b>0.0000</b>	<b>649.7488</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0354	0.1577	0.6313	3.8600e-003		0.0490	0.0490		0.0490	0.0490	0.0000	701.2124	701.2124	0.0134	0.0000	701.5484
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0786</b>	<b>0.3507</b>	<b>0.7413</b>	<b>4.0700e-003</b>		<b>0.0553</b>	<b>0.0553</b>		<b>0.0553</b>	<b>0.0553</b>	<b>0.0000</b>	<b>721.2477</b>	<b>721.2477</b>	<b>0.0163</b>	<b>0.0000</b>	<b>721.6539</b>

**11.0 Vegetation**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-400.8300	0.0000	0.0000	-400.8300

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 139	-400.8300	0.0000	0.0000	-400.8300
<b>Total</b>		<b>-400.8300</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-400.8300</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	2/5/2027	12/31/2020
tblConstructionPhase	PhaseEndDate	4/3/2026	12/15/2020
tblConstructionPhase	PhaseEndDate	4/24/2020	11/30/2019
tblConstructionPhase	PhaseEndDate	9/4/2026	8/15/2020
tblConstructionPhase	PhaseEndDate	9/20/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	9/5/2026	3/15/2020
tblConstructionPhase	PhaseStartDate	4/25/2020	12/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	4/4/2026	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.77
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,292.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	61.60
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,698,703.00
tblWater	IndoorWaterUseRate	6,341,692.50	17,178,053.00
tblWater	IndoorWaterUseRate	29,818,908.53	11,317,305.00
tblWater	IndoorWaterUseRate	9,629,427.79	10,559,450.00
tblWater	IndoorWaterUseRate	0.00	33,042,489.00
tblWater	OutdoorWaterUseRate	277,159.33	243,846.00
tblWater	OutdoorWaterUseRate	704,632.50	891,479.00
tblWater	OutdoorWaterUseRate	1,903,334.59	587,327.00
tblWater	OutdoorWaterUseRate	5,901,907.36	547,997.00
tblWater	OutdoorWaterUseRate	0.00	1,714,786.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.7107	54.5914	40.8177	0.1181	24.2362	2.3915	26.6277	13.2801	2.2001	15.4803	0.0000	11,913.2689	11,913.2689	1.9500	0.0000	11,944.0967
2020	42.0084	57.4517	57.8730	0.1512	5.5509	2.1281	7.6790	1.4990	1.9937	3.4926	0.0000	15,102.4003	15,102.4003	1.9297	0.0000	15,150.6431
Maximum	42.0084	57.4517	57.8730	0.1512	24.2362	2.3915	26.6277	13.2801	2.2001	15.4803	0.0000	15,102.4003	15,102.4003	1.9500	0.0000	15,150.6431

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.0234	41.4610	41.5277	0.1181	10.9876	1.1261	11.1306	5.9976	1.0451	6.1406	0.0000	11,913.2689	11,913.2689	1.9500	0.0000	11,944.0967
2020	39.5841	49.3945	61.5429	0.1512	5.5509	0.3885	5.9394	1.4990	0.3810	1.8800	0.0000	15,102.4003	15,102.4003	1.9297	0.0000	15,150.6431
Maximum	39.5841	49.3945	61.5429	0.1512	10.9876	1.1261	11.1306	5.9976	1.0451	6.1406	0.0000	15,102.4003	15,102.4003	1.9500	0.0000	15,150.6431

	ROG	NOx	CO	SO2	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	8.62	18.91	-4.44	0.00	44.48	66.49	50.24	49.28	66.00	57.73	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
Mobile	25.3644	176.1494	279.2689	1.2799	90.5767	0.9304	91.5071	24.2621	0.8736	25.1357		130,373.4192	130,373.4192	5.1786		130,502.8845
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>45.0587</b>	<b>209.2011</b>	<b>301.6988</b>	<b>1.3357</b>	<b>90.5767</b>	<b>2.2597</b>	<b>92.8364</b>	<b>24.2621</b>	<b>2.2028</b>	<b>26.4649</b>		<b>138,297.3156</b>	<b>138,297.3156</b>	<b>5.7794</b>	<b>1.2000e-004</b>	<b>138,441.8362</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**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	lb/day										lb/day					
Area	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
Mobile	25.3644	176.1494	279.2689	1.2799	90.5767	0.9304	91.5071	24.2621	0.8736	25.1357		130,373.4192	130,373.4192	5.1786		130,502.8845
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>45.0587</b>	<b>209.2011</b>	<b>301.6988</b>	<b>1.3357</b>	<b>90.5767</b>	<b>2.2597</b>	<b>92.8364</b>	<b>24.2621</b>	<b>2.2028</b>	<b>26.4649</b>		<b>138,297.3156</b>	<b>138,297.3156</b>	<b>5.7794</b>	<b>1.2000e-004</b>	<b>138,441.8362</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 77.49**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 712,460; Non-Residential Outdoor: 237,487; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	432.00	173.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>24.0883</b>	<b>2.3904</b>	<b>26.4787</b>	<b>13.2409</b>	<b>2.1991</b>	<b>15.4400</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.8398	0.0000	10.8398	5.9584	0.0000	5.9584			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>10.8398</b>	<b>0.1419</b>	<b>10.9817</b>	<b>5.9584</b>	<b>0.1419</b>	<b>6.1003</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					20.6826	0.0000	20.6826	8.5763	0.0000	8.5763			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>20.6826</b>	<b>2.3827</b>	<b>23.0652</b>	<b>8.5763</b>	<b>2.1920</b>	<b>10.7683</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3072	0.0000	9.3072	3.8593	0.0000	3.8593			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>9.3072</b>	<b>1.1249</b>	<b>10.4321</b>	<b>3.8593</b>	<b>1.0439</b>	<b>4.9033</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9211	22.8615	5.0444	0.0512	1.1724	0.1817	1.3541	0.3376	0.1738	0.5114		5,350.436 2	5,350.436 2	0.4419		5,361.484 0
Worker	2.4284	1.5390	18.6096	0.0400	3.5488	0.0262	3.5750	0.9413	0.0242	0.9655		3,971.252 6	3,971.252 6	0.1599		3,975.249 2
<b>Total</b>	<b>3.3495</b>	<b>24.4005</b>	<b>23.6540</b>	<b>0.0912</b>	<b>4.7212</b>	<b>0.2079</b>	<b>4.9291</b>	<b>1.2789</b>	<b>0.1980</b>	<b>1.4769</b>		<b>9,321.688 8</b>	<b>9,321.688 8</b>	<b>0.6018</b>		<b>9,336.733 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9211	22.8615	5.0444	0.0512	1.1724	0.1817	1.3541	0.3376	0.1738	0.5114		5,350.436 2	5,350.436 2	0.4419		5,361.484 0
Worker	2.4284	1.5390	18.6096	0.0400	3.5488	0.0262	3.5750	0.9413	0.0242	0.9655		3,971.252 6	3,971.252 6	0.1599		3,975.249 2
<b>Total</b>	<b>3.3495</b>	<b>24.4005</b>	<b>23.6540</b>	<b>0.0912</b>	<b>4.7212</b>	<b>0.2079</b>	<b>4.9291</b>	<b>1.2789</b>	<b>0.1980</b>	<b>1.4769</b>		<b>9,321.688 8</b>	<b>9,321.688 8</b>	<b>0.6018</b>		<b>9,336.733 2</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7434	20.8586	4.3571	0.0509	1.1725	0.1162	1.2886	0.3376	0.1111	0.4487		5,314.790 5	5,314.790 5	0.4029		5,324.863 2
Worker	2.1714	1.3435	16.3592	0.0387	3.5488	0.0253	3.5740	0.9413	0.0233	0.9646		3,846.149 8	3,846.149 8	0.1363		3,849.556 5
<b>Total</b>	<b>2.9148</b>	<b>22.2021</b>	<b>20.7163</b>	<b>0.0895</b>	<b>4.7212</b>	<b>0.1414</b>	<b>4.8626</b>	<b>1.2789</b>	<b>0.1344</b>	<b>1.4133</b>		<b>9,160.940 2</b>	<b>9,160.940 2</b>	<b>0.5392</b>		<b>9,174.419 7</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7434	20.8586	4.3571	0.0509	1.1725	0.1162	1.2886	0.3376	0.1111	0.4487		5,314.790 5	5,314.790 5	0.4029		5,324.863 2
Worker	2.1714	1.3435	16.3592	0.0387	3.5488	0.0253	3.5740	0.9413	0.0233	0.9646		3,846.149 8	3,846.149 8	0.1363		3,849.556 5
<b>Total</b>	<b>2.9148</b>	<b>22.2021</b>	<b>20.7163</b>	<b>0.0895</b>	<b>4.7212</b>	<b>0.1414</b>	<b>4.8626</b>	<b>1.2789</b>	<b>0.1344</b>	<b>1.4133</b>		<b>9,160.940 2</b>	<b>9,160.940 2</b>	<b>0.5392</b>		<b>9,174.419 7</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.4588</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.6632</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.7651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>33.0073</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4323	0.2675	3.2567	7.7000e-003	0.7065	5.0300e-003	0.7115	0.1874	4.6300e-003	0.1920		765.6687	765.6687	0.0271		766.3469
<b>Total</b>	<b>0.4323</b>	<b>0.2675</b>	<b>3.2567</b>	<b>7.7000e-003</b>	<b>0.7065</b>	<b>5.0300e-003</b>	<b>0.7115</b>	<b>0.1874</b>	<b>4.6300e-003</b>	<b>0.1920</b>		<b>765.6687</b>	<b>765.6687</b>	<b>0.0271</b>		<b>766.3469</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.7651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>32.8246</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4323	0.2675	3.2567	7.7000e-003	0.7065	5.0300e-003	0.7115	0.1874	4.6300e-003	0.1920		765.6687	765.6687	0.0271		766.3469
<b>Total</b>	<b>0.4323</b>	<b>0.2675</b>	<b>3.2567</b>	<b>7.7000e-003</b>	<b>0.7065</b>	<b>5.0300e-003</b>	<b>0.7115</b>	<b>0.1874</b>	<b>4.6300e-003</b>	<b>0.1920</b>		<b>765.6687</b>	<b>765.6687</b>	<b>0.0271</b>		<b>766.3469</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	25.3644	176.1494	279.2689	1.2799	90.5767	0.9304	91.5071	24.2621	0.8736	25.1357		130,373.4 192	130,373.4 192	5.1786		130,502.8 845
Unmitigated	25.3644	176.1494	279.2689	1.2799	90.5767	0.9304	91.5071	24.2621	0.8736	25.1357		130,373.4 192	130,373.4 192	5.1786		130,502.8 845

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	5,061.61	5,061.61	5,061.61	21,209,322	21,209,322
Total	9,933.67	9,933.67	9,933.67	42,285,013	42,285,013

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	61.60	19.40	19.00	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
NaturalGas Unmitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.9526	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
<b>Total</b>		<b>5.8000e-004</b>	<b>5.2900e-003</b>	<b>4.4400e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.3474</b>	<b>6.3474</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>6.3851</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0539526	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
<b>Total</b>		<b>5.8000e-004</b>	<b>5.2900e-003</b>	<b>4.4400e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.3474</b>	<b>6.3474</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>6.3851</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Unmitigated	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0571	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
<b>Total</b>	<b>12.3044</b>	<b>5.6200e-003</b>	<b>0.6202</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4700e-003</b>		<b>1.4196</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0571	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
<b>Total</b>	<b>12.3044</b>	<b>5.6200e-003</b>	<b>0.6202</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4700e-003</b>		<b>1.4196</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	2/5/2027	12/31/2020
tblConstructionPhase	PhaseEndDate	4/3/2026	12/15/2020
tblConstructionPhase	PhaseEndDate	4/24/2020	11/30/2019
tblConstructionPhase	PhaseEndDate	9/4/2026	8/15/2020
tblConstructionPhase	PhaseEndDate	9/20/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	9/5/2026	3/15/2020
tblConstructionPhase	PhaseStartDate	4/25/2020	12/1/2019
tblConstructionPhase	PhaseStartDate	9/21/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	4/4/2026	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.77
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,292.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	0.00	61.60
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,698,703.00
tblWater	IndoorWaterUseRate	6,341,692.50	17,178,053.00
tblWater	IndoorWaterUseRate	29,818,908.53	11,317,305.00
tblWater	IndoorWaterUseRate	9,629,427.79	10,559,450.00
tblWater	IndoorWaterUseRate	0.00	33,042,489.00
tblWater	OutdoorWaterUseRate	277,159.33	243,846.00
tblWater	OutdoorWaterUseRate	704,632.50	891,479.00
tblWater	OutdoorWaterUseRate	1,903,334.59	587,327.00
tblWater	OutdoorWaterUseRate	5,901,907.36	547,997.00
tblWater	OutdoorWaterUseRate	0.00	1,714,786.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.4470	54.6055	38.8707	0.1111	24.2362	2.3915	26.6277	13.2801	2.2001	15.4803	0.0000	11,211.6638	11,211.6638	1.9491	0.0000	11,243.3311
2020	41.7132	58.1614	55.4704	0.1432	5.5509	2.1308	7.6817	1.4990	1.9963	3.4952	0.0000	14,296.5009	14,296.5009	1.9580	0.0000	14,345.4505
Maximum	41.7132	58.1614	55.4704	0.1432	24.2362	2.3915	26.6277	13.2801	2.2001	15.4803	0.0000	14,296.5009	14,296.5009	1.9580	0.0000	14,345.4505

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.7598	41.4750	39.5807	0.1111	10.9876	1.1261	11.1306	5.9976	1.0451	6.1406	0.0000	11,211.6638	11,211.6638	1.9491	0.0000	11,243.3311
2020	39.2889	50.1042	59.1402	0.1432	5.5509	0.3912	5.9421	1.4990	0.3836	1.8826	0.0000	14,296.5009	14,296.5009	1.9580	0.0000	14,345.4505
Maximum	39.2889	50.1042	59.1402	0.1432	10.9876	1.1261	11.1306	5.9976	1.0451	6.1406	0.0000	14,296.5009	14,296.5009	1.9580	0.0000	14,345.4505

	ROG	NOx	CO	SO2	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	8.72	18.79	-4.64	0.00	44.48	66.45	50.24	49.28	65.95	57.72	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
Mobile	19.5990	182.7045	244.7921	1.1706	90.5767	0.9343	91.5110	24.2621	0.8773	25.1394		119,407.9031	119,407.9031	5.3692		119,542.1328
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>39.2934</b>	<b>215.7562</b>	<b>267.2221</b>	<b>1.2265</b>	<b>90.5767</b>	<b>2.2636</b>	<b>92.8403</b>	<b>24.2621</b>	<b>2.2066</b>	<b>26.4687</b>		<b>127,331.7995</b>	<b>127,331.7995</b>	<b>5.9700</b>	<b>1.2000e-004</b>	<b>127,481.0844</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**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	lb/day										lb/day					
Area	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Energy	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
Mobile	19.5990	182.7045	244.7921	1.1706	90.5767	0.9343	91.5110	24.2621	0.8773	25.1394		119,407.9031	119,407.9031	5.3692		119,542.1328
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>39.2934</b>	<b>215.7562</b>	<b>267.2221</b>	<b>1.2265</b>	<b>90.5767</b>	<b>2.2636</b>	<b>92.8403</b>	<b>24.2621</b>	<b>2.2066</b>	<b>26.4687</b>		<b>127,331.7995</b>	<b>127,331.7995</b>	<b>5.9700</b>	<b>1.2000e-004</b>	<b>127,481.0844</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 77.49**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 712,460; Non-Residential Outdoor: 237,487; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	432.00	173.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	86.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					24.0883	0.0000	24.0883	13.2409	0.0000	13.2409			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>24.0883</b>	<b>2.3904</b>	<b>26.4787</b>	<b>13.2409</b>	<b>2.1991</b>	<b>15.4400</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.8398	0.0000	10.8398	5.9584	0.0000	5.9584			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>10.8398</b>	<b>0.1419</b>	<b>10.9817</b>	<b>5.9584</b>	<b>0.1419</b>	<b>6.1003</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					20.6826	0.0000	20.6826	8.5763	0.0000	8.5763			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>20.6826</b>	<b>2.3827</b>	<b>23.0652</b>	<b>8.5763</b>	<b>2.1920</b>	<b>10.7683</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.3072	0.0000	9.3072	3.8593	0.0000	3.8593			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>9.3072</b>	<b>1.1249</b>	<b>10.4321</b>	<b>3.8593</b>	<b>1.0439</b>	<b>4.9033</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9613	23.3634	5.9272	0.0495	1.1724	0.1853	1.3577	0.3376	0.1772	0.5148		5,176.1209	5,176.1209	0.4967		5,188.5385
Worker	2.1246	1.8422	15.7797	0.0346	3.5488	0.0262	3.5750	0.9413	0.0242	0.9655		3,443.9628	3,443.9628	0.1387		3,447.4291
<b>Total</b>	<b>3.0859</b>	<b>25.2056</b>	<b>21.7069</b>	<b>0.0842</b>	<b>4.7212</b>	<b>0.2115</b>	<b>4.9327</b>	<b>1.2789</b>	<b>0.2014</b>	<b>1.4803</b>		<b>8,620.0837</b>	<b>8,620.0837</b>	<b>0.6354</b>		<b>8,635.9676</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9613	23.3634	5.9272	0.0495	1.1724	0.1853	1.3577	0.3376	0.1772	0.5148		5,176.1209	5,176.1209	0.4967		5,188.5385
Worker	2.1246	1.8422	15.7797	0.0346	3.5488	0.0262	3.5750	0.9413	0.0242	0.9655		3,443.9628	3,443.9628	0.1387		3,447.4291
<b>Total</b>	<b>3.0859</b>	<b>25.2056</b>	<b>21.7069</b>	<b>0.0842</b>	<b>4.7212</b>	<b>0.2115</b>	<b>4.9327</b>	<b>1.2789</b>	<b>0.2014</b>	<b>1.4803</b>		<b>8,620.0837</b>	<b>8,620.0837</b>	<b>0.6354</b>		<b>8,635.9676</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7803	21.2451	5.1675	0.0492	1.1725	0.1189	1.2913	0.3376	0.1137	0.4513		5,139.5108	5,139.5108	0.4547		5,150.8792
Worker	1.9022	1.6055	13.7550	0.0335	3.5488	0.0253	3.5740	0.9413	0.0233	0.9646		3,335.0283	3,335.0283	0.1172		3,337.9577
<b>Total</b>	<b>2.6825</b>	<b>22.8506</b>	<b>18.9225</b>	<b>0.0827</b>	<b>4.7212</b>	<b>0.1441</b>	<b>4.8654</b>	<b>1.2789</b>	<b>0.1370</b>	<b>1.4159</b>		<b>8,474.5391</b>	<b>8,474.5391</b>	<b>0.5719</b>		<b>8,488.8369</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7803	21.2451	5.1675	0.0492	1.1725	0.1189	1.2913	0.3376	0.1137	0.4513		5,139.510 8	5,139.510 8	0.4547		5,150.879 2
Worker	1.9022	1.6055	13.7550	0.0335	3.5488	0.0253	3.5740	0.9413	0.0233	0.9646		3,335.028 3	3,335.028 3	0.1172		3,337.957 7
<b>Total</b>	<b>2.6825</b>	<b>22.8506</b>	<b>18.9225</b>	<b>0.0827</b>	<b>4.7212</b>	<b>0.1441</b>	<b>4.8654</b>	<b>1.2789</b>	<b>0.1370</b>	<b>1.4159</b>		<b>8,474.539 1</b>	<b>8,474.539 1</b>	<b>0.5719</b>		<b>8,488.836 9</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.4588</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.6632</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.7651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>33.0073</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3787	0.3196	2.7383	6.6700e-003	0.7065	5.0300e-003	0.7115	0.1874	4.6300e-003	0.1920		663.9177	663.9177	0.0233		664.5009
<b>Total</b>	<b>0.3787</b>	<b>0.3196</b>	<b>2.7383</b>	<b>6.6700e-003</b>	<b>0.7065</b>	<b>5.0300e-003</b>	<b>0.7115</b>	<b>0.1874</b>	<b>4.6300e-003</b>	<b>0.1920</b>		<b>663.9177</b>	<b>663.9177</b>	<b>0.0233</b>		<b>664.5009</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.7651					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>32.8246</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3787	0.3196	2.7383	6.6700e-003	0.7065	5.0300e-003	0.7115	0.1874	4.6300e-003	0.1920		663.9177	663.9177	0.0233		664.5009
<b>Total</b>	<b>0.3787</b>	<b>0.3196</b>	<b>2.7383</b>	<b>6.6700e-003</b>	<b>0.7065</b>	<b>5.0300e-003</b>	<b>0.7115</b>	<b>0.1874</b>	<b>4.6300e-003</b>	<b>0.1920</b>		<b>663.9177</b>	<b>663.9177</b>	<b>0.0233</b>		<b>664.5009</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.5990	182.7045	244.7921	1.1706	90.5767	0.9343	91.5110	24.2621	0.8773	25.1394		119,407.9031	119,407.9031	5.3692		119,542.1328
Unmitigated	19.5990	182.7045	244.7921	1.1706	90.5767	0.9343	91.5110	24.2621	0.8773	25.1394		119,407.9031	119,407.9031	5.3692		119,542.1328

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	5,061.61	5,061.61	5,061.61	21,209,322	21,209,322
Total	9,933.67	9,933.67	9,933.67	42,285,013	42,285,013

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	61.60	19.40	19.00	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
NaturalGas Unmitigated	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.9526	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
<b>Total</b>		<b>5.8000e-004</b>	<b>5.2900e-003</b>	<b>4.4400e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.3474</b>	<b>6.3474</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>6.3851</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0539526	5.8000e-004	5.2900e-003	4.4400e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.3474	6.3474	1.2000e-004	1.2000e-004	6.3851
<b>Total</b>		<b>5.8000e-004</b>	<b>5.2900e-003</b>	<b>4.4400e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.3474</b>	<b>6.3474</b>	<b>1.2000e-004</b>	<b>1.2000e-004</b>	<b>6.3851</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
Unmitigated	12.3044	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0571	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
<b>Total</b>	<b>12.3044</b>	<b>5.6200e-003</b>	<b>0.6202</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4700e-003</b>		<b>1.4196</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0571	5.6200e-003	0.6202	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3329	1.3329	3.4700e-003		1.4196
<b>Total</b>	<b>12.3044</b>	<b>5.6200e-003</b>	<b>0.6202</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4700e-003</b>		<b>1.4196</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

## **11.0 Vegetation**

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**Redding Rancheria FTT and Casino Project – Alternative A**  
**Shasta County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.01	0.17	0.00	0.00	0.83	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.31	0.12	-0.03	0.00	0.78	0.77	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.38	0.24	-0.10	0.00	0.53	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.23	0.20	-0.17	0.00	0.88	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	2	2	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	2	2	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	9	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 3	0.00



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.53100E-002	1.75960E-001	1.91380E-001	3.10000E-004	1.15900E-002	1.15900E-002	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67332E+001
Cranes	5.44400E-002	6.47520E-001	2.53440E-001	6.90000E-004	2.67600E-002	2.46200E-002	0.00000E+000	6.04326E+001	6.04326E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	1.69500E-002	1.74320E-001	2.12110E-001	3.40000E-004	8.41000E-003	7.73000E-003	0.00000E+000	3.01396E+001	3.01396E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	5.92800E-002	5.33700E-001	4.82010E-001	6.20000E-004	3.99000E-002	3.67100E-002	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53324E+001
Generator Sets	5.47700E-002	4.76380E-001	5.04150E-001	8.90000E-004	2.70100E-002	2.70100E-002	0.00000E+000	7.68682E+001	7.68682E+001	4.37000E-003	0.00000E+000	7.69775E+001
Graders	1.58200E-002	2.13840E-001	5.97400E-002	2.20000E-004	6.86000E-003	6.31000E-003	0.00000E+000	1.93892E+001	1.93892E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	1.99600E-002	2.13580E-001	2.20270E-001	3.60000E-004	1.03800E-002	9.55000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	1.57700E-002	1.62740E-001	1.92610E-001	3.10000E-004	8.14000E-003	7.49000E-003	0.00000E+000	2.72012E+001	2.72012E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	1.58200E-002	1.58170E-001	1.43900E-001	2.00000E-004	1.00800E-002	9.28000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	1.13460E-001	1.20744E+000	4.28410E-001	8.50000E-004	5.88700E-002	5.41600E-002	0.00000E+000	7.66960E+001	7.66960E+001	2.42700E-002	0.00000E+000	7.73026E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84396E+001	8.84396E+001	2.79800E-002	0.00000E+000	8.91391E+001
Tractors/Loaders/ Backhoes	1.11550E-001	1.12053E+000	1.17143E+000	1.59000E-003	7.23700E-002	6.65800E-002	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	4.70000E-002	2.14280E-001	2.40760E-001	3.50000E-004	1.19600E-002	1.19600E-002	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	6.21000E-003	1.41800E-001	1.91490E-001	3.10000E-004	1.49000E-003	1.49000E-003	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67331E+001
Cranes	1.68700E-002	3.26190E-001	3.65560E-001	6.90000E-004	1.86000E-003	1.86000E-003	0.00000E+000	6.04325E+001	6.04325E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	8.26000E-003	1.59690E-001	2.54670E-001	3.40000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.01395E+001	3.01395E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	1.53700E-002	3.50960E-001	4.73920E-001	6.20000E-004	3.69000E-003	3.69000E-003	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53323E+001
Generator Sets	1.78900E-002	4.08530E-001	5.51660E-001	8.90000E-004	4.29000E-003	4.29000E-003	0.00000E+000	7.68681E+001	7.68681E+001	4.37000E-003	0.00000E+000	7.69774E+001
Graders	5.27000E-003	1.01960E-001	1.14260E-001	2.20000E-004	5.80000E-004	5.80000E-004	0.00000E+000	1.93891E+001	1.93891E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	8.78000E-003	1.69790E-001	2.70790E-001	3.60000E-004	1.23000E-003	1.23000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	7.64000E-003	1.47780E-001	2.35680E-001	3.10000E-004	1.07000E-003	1.07000E-003	0.00000E+000	2.72011E+001	2.72011E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	4.89000E-003	1.11650E-001	1.50770E-001	2.00000E-004	1.17000E-003	1.17000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	2.09100E-002	4.04270E-001	4.53060E-001	8.50000E-004	2.30000E-003	2.30000E-003	0.00000E+000	7.66959E+001	7.66959E+001	2.42700E-002	0.00000E+000	7.73025E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84395E+001	8.84395E+001	2.79800E-002	0.00000E+000	8.91390E+001
Tractors/Loaders/Balckhoes	3.88900E-002	8.88010E-001	1.19914E+000	1.59000E-003	9.33000E-003	9.33000E-003	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	1.44000E-002	2.29890E-001	2.03570E-001	3.50000E-004	2.09000E-003	2.09000E-003	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.54642E-001	1.94135E-001	-5.74773E-004	0.00000E+000	8.71441E-001	8.71441E-001	0.00000E+000	1.12437E-006	1.12437E-006	0.00000E+000	0.00000E+000	1.49627E-006
Cranes	6.90118E-001	4.96247E-001	-4.42393E-001	0.00000E+000	9.30493E-001	9.24452E-001	0.00000E+000	1.15832E-006	1.15832E-006	0.00000E+000	0.00000E+000	1.14904E-006
Excavators	5.12684E-001	8.39261E-002	-2.00651E-001	0.00000E+000	8.62069E-001	8.49935E-001	0.00000E+000	1.32716E-006	1.32716E-006	0.00000E+000	0.00000E+000	9.87559E-007
Forklifts	7.40722E-001	3.42402E-001	1.67839E-002	0.00000E+000	9.07519E-001	8.99482E-001	0.00000E+000	1.09311E-006	1.09311E-006	0.00000E+000	0.00000E+000	1.26508E-006
Generator Sets	6.73361E-001	1.42428E-001	-9.42378E-002	0.00000E+000	8.41170E-001	8.41170E-001	0.00000E+000	1.17084E-006	1.17084E-006	0.00000E+000	0.00000E+000	1.29908E-006
Graders	6.66877E-001	5.23195E-001	-9.12621E-001	0.00000E+000	9.15452E-001	9.08082E-001	0.00000E+000	1.03150E-006	1.03150E-006	0.00000E+000	0.00000E+000	1.53511E-006
Pavers	5.60120E-001	2.05029E-001	-2.29355E-001	0.00000E+000	8.81503E-001	8.71204E-001	0.00000E+000	1.27432E-006	1.27432E-006	0.00000E+000	0.00000E+000	1.26410E-006
Paving Equipment	5.15536E-001	9.19258E-002	-2.23612E-001	0.00000E+000	8.68550E-001	8.57143E-001	0.00000E+000	1.47053E-006	1.47053E-006	0.00000E+000	0.00000E+000	1.09405E-006
Rollers	6.90898E-001	2.94114E-001	-4.77415E-002	0.00000E+000	8.83929E-001	8.73922E-001	0.00000E+000	1.14176E-006	1.14176E-006	0.00000E+000	0.00000E+000	1.13260E-006
Rubber Tired Dozers	8.15706E-001	6.65184E-001	-5.75383E-002	0.00000E+000	9.60931E-001	9.57533E-001	0.00000E+000	1.17346E-006	1.17346E-006	0.00000E+000	0.00000E+000	1.29362E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13072E-006	1.13072E-006	0.00000E+000	0.00000E+000	1.23403E-006
Tractors/Loaders/Backhoes	6.51367E-001	2.07509E-001	-2.36548E-002	0.00000E+000	8.71079E-001	8.59868E-001	0.00000E+000	1.13612E-006	1.13612E-006	0.00000E+000	0.00000E+000	1.19752E-006
Welders	6.93617E-001	-7.28486E-002	1.54469E-001	0.00000E+000	8.25251E-001	8.25251E-001	0.00000E+000	1.17197E-006	1.17197E-006	0.00000E+000	0.00000E+000	1.16761E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.07	0.02	0.07	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.61	0.17	0.61	0.17	0.00	0.00
Grading	Fugitive Dust	0.67	0.28	0.30	0.13	0.55	0.55
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.54	0.30	0.24	0.13	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.03	29.12	29.60	29.62	29.29
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.45		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00

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tblConstructionPhase	PhaseEndDate	9/22/2023	7/2/2020
tblConstructionPhase	PhaseStartDate	7/1/2023	7/1/2020
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2040

## 2.0 Emissions Summary

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**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	7.0000e-005	6.0000e-005	5.7000e-004	0.0000	0.5421	0.0000	0.5421	0.2980	0.0000	0.2980	0.0000	0.1303	0.1303	0.0000	0.0000	0.1304
Maximum	7.0000e-005	6.0000e-005	5.7000e-004	0.0000	0.5421	0.0000	0.5421	0.2980	0.0000	0.2980	0.0000	0.1303	0.1303	0.0000	0.0000	0.1304

**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					
2020	7.0000e-005	6.0000e-005	5.7000e-004	0.0000	0.2440	0.0000	0.2440	0.1341	0.0000	0.1341	0.0000	0.1303	0.1303	0.0000	0.0000	0.1304
Maximum	7.0000e-005	6.0000e-005	5.7000e-004	0.0000	0.2440	0.0000	0.2440	0.1341	0.0000	0.1341	0.0000	0.1303	0.1303	0.0000	0.0000	0.1304

	ROG	NOx	CO	SO2	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	54.98	0.00	54.98	54.99	0.00	54.99	0.00	0.00	0.00	0.00	0.00	0.00

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

**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	2.2402	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158
Energy	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	2,227.6121	2,227.6121	0.0921	0.0238	2,237.0140
Mobile	3.3609	33.3456	30.1674	0.1520	9.1964	0.0955	9.2919	2.4713	0.0894	2.5607	0.0000	14,116.7729	14,116.7729	0.9389	0.0000	14,140.2444
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	55.5505	0.0000	55.5505	3.2829	0.0000	137.6240
Water						0.0000	0.0000		0.0000	0.0000	15.9046	87.8611	103.7657	1.6375	0.0394	156.4433
<b>Total</b>	<b>5.7133</b>	<b>34.0025</b>	<b>31.2211</b>	<b>0.1579</b>	<b>9.1964</b>	<b>0.1742</b>	<b>9.3706</b>	<b>2.4713</b>	<b>0.1681</b>	<b>2.6394</b>	<b>71.4551</b>	<b>17,153.6025</b>	<b>17,225.0576</b>	<b>5.9679</b>	<b>0.0632</b>	<b>17,393.0955</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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	2.2402	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158
Energy	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	2,227.6121	2,227.6121	0.0921	0.0238	2,237.0140
Mobile	3.3609	33.3456	30.1674	0.1520	9.1964	0.0955	9.2919	2.4713	0.0894	2.5607	0.0000	14,116.7729	14,116.7729	0.9389	0.0000	14,140.2444
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	55.5505	0.0000	55.5505	3.2829	0.0000	137.6240
Water						0.0000	0.0000		0.0000	0.0000	11.1969	63.4288	74.6257	1.1529	0.0278	111.7169
<b>Total</b>	<b>5.7133</b>	<b>34.0025</b>	<b>31.2211</b>	<b>0.1579</b>	<b>9.1964</b>	<b>0.1742</b>	<b>9.3706</b>	<b>2.4713</b>	<b>0.1681</b>	<b>2.6394</b>	<b>66.7474</b>	<b>17,129.1703</b>	<b>17,195.9176</b>	<b>5.4833</b>	<b>0.0516</b>	<b>17,348.3691</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>6.59</b>	<b>0.14</b>	<b>0.17</b>	<b>8.12</b>	<b>18.41</b>	<b>0.26</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-400.8300
<b>Total</b>	<b>-400.8300</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2020	7/2/2020	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**3.2 Site Preparation - 2020****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	7.0000e-005	6.0000e-005	5.7000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1303	0.1303	0.0000	0.0000	0.1304
<b>Total</b>	<b>7.0000e-005</b>	<b>6.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1303</b>	<b>0.1303</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1304</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	3.3609	33.3456	30.1674	0.1520	9.1964	0.0955	9.2919	2.4713	0.0894	2.5607	0.0000	14,116.77 29	14,116.77 29	0.9389	0.0000	14,140.24 44
Unmitigated	3.3609	33.3456	30.1674	0.1520	9.1964	0.0955	9.2919	2.4713	0.0894	2.5607	0.0000	14,116.77 29	14,116.77 29	0.9389	0.0000	14,140.24 44

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	5,551.00	6,496.10	3281.20	9,400,795	9,400,795
User Defined Recreational	0.00	0.00	0.00		
Total	13,509.46	16,043.56	10,981.66	24,784,204	24,784,204

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1,894.8909	1,894.8909	0.0857	0.0177	1,902.3156
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,894.8909	1,894.8909	0.0857	0.0177	1,902.3156
NaturalGas Mitigated	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	332.7212	332.7212	6.3800e-003	6.1000e-003	334.6984
NaturalGas Unmitigated	0.0336	0.3056	0.2567	1.8300e-003		0.0232	0.0232		0.0232	0.0232	0.0000	332.7212	332.7212	6.3800e-003	6.1000e-003	334.6984

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**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					
Arena	211176	1.1400e-003	0.0104	8.7000e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.2692	11.2692	2.2000e-004	2.1000e-004	11.3361
Enclosed Parking Structure	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
Hotel	4.47674e+006	0.0241	0.2195	0.1843	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8961	238.8961	4.5800e-003	4.3800e-003	240.3157
Movie Theater (No Matinee)	150840	8.1000e-004	7.3900e-003	6.2100e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0494	8.0494	1.5000e-004	1.5000e-004	8.0972
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
Regional Shopping Center	1.3962e+006	7.5300e-003	0.0684	0.0575	4.1000e-004		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	74.5066	74.5066	1.4300e-003	1.3700e-003	74.9493
User Defined Recreational	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
<b>Total</b>		<b>0.0336</b>	<b>0.3056</b>	<b>0.2567</b>	<b>1.8300e-003</b>		<b>0.0232</b>	<b>0.0232</b>		<b>0.0232</b>	<b>0.0232</b>	<b>0.0000</b>	<b>332.7212</b>	<b>332.7212</b>	<b>6.3800e-003</b>	<b>6.1100e-003</b>	<b>334.6984</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	211176	1.1400e-003	0.0104	8.7000e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.2692	11.2692	2.2000e-004	2.1000e-004	11.3361
Enclosed Parking Structure	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
Hotel	4.47674e+006	0.0241	0.2195	0.1843	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8961	238.8961	4.5800e-003	4.3800e-003	240.3157
Movie Theater (No Matinee)	150840	8.1000e-004	7.3900e-003	6.2100e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004	0.0000	8.0494	8.0494	1.5000e-004	1.5000e-004	8.0972
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
Regional Shopping Center	1.3962e+006	7.5300e-003	0.0684	0.0575	4.1000e-004		5.2000e-003	5.2000e-003		5.2000e-003	5.2000e-003	0.0000	74.5066	74.5066	1.4300e-003	1.3700e-003	74.9493
User Defined Recreational	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
<b>Total</b>		<b>0.0336</b>	<b>0.3056</b>	<b>0.2567</b>	<b>1.8300e-003</b>		<b>0.0232</b>	<b>0.0232</b>		<b>0.0232</b>	<b>0.0232</b>	<b>0.0000</b>	<b>332.7212</b>	<b>332.7212</b>	<b>6.3800e-003</b>	<b>6.1100e-003</b>	<b>334.6984</b>



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	90619.2	26.3622	1.1900e-003	2.5000e-004	26.4655
Enclosed Parking Structure	3.82193e+006	1,111.8418	0.0503	0.0104	1,116.1983
Hotel	1.45086e+006	422.0724	0.0191	3.9500e-003	423.7262
Movie Theater (No Matinee)	64728	18.8301	8.5000e-004	1.8000e-004	18.9039
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.0855e+006	315.7844	0.0143	2.9500e-003	317.0217
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,894.8909</b>	<b>0.0857</b>	<b>0.0177</b>	<b>1,902.3156</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	90619.2	26.3622	1.1900e-003	2.5000e-004	26.4655
Enclosed Parking Structure	3.82193e+006	1,111.8418	0.0503	0.0104	1,116.1983
Hotel	1.45086e+006	422.0724	0.0191	3.9500e-003	423.7262
Movie Theater (No Matinee)	64728	18.8301	8.5000e-004	1.8000e-004	18.9039
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	1.0855e+006	315.7844	0.0143	2.9500e-003	317.0217
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,894.8909</b>	<b>0.0857</b>	<b>0.0177</b>	<b>1,902.3156</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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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					
Mitigated	2.2402	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158
Unmitigated	2.2402	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158

## 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	0.3424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0900e-003	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158
<b>Total</b>	<b>2.2402</b>	<b>5.0000e-004</b>	<b>0.0556</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1088</b>	<b>0.1088</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1158</b>

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**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	0.3424					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8927					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0900e-003	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1088	0.1088	2.8000e-004	0.0000	0.1158
<b>Total</b>	<b>2.2402</b>	<b>5.0000e-004</b>	<b>0.0556</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1088</b>	<b>0.1088</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1158</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	74.6257	1.1529	0.0278	111.7169
Unmitigated	103.7657	1.6375	0.0394	156.4433

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.34216 / 0.277159	8.4949	0.1418	3.4100e-003	13.0556
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	6.34169 / 0.704632	12.7120	0.2071	4.9800e-003	19.3740
Movie Theater (No Matinee)	29.8189 / 1.90333	58.3367	0.9739	0.0234	89.6564
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	9.62943 / 5.90191	24.2221	0.3147	7.6100e-003	34.3573
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>103.7657</b>	<b>1.6375</b>	<b>0.0394</b>	<b>156.4433</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.05688 / 0.2439	6.0301	0.0998	2.4000e-003	9.2410
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.46455 / 0.620077	9.0755	0.1458	3.5100e-003	13.7661
Movie Theater (No Matinee)	20.9925 / 1.67493	41.4101	0.6856	0.0165	63.4605
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	6.77912 / 5.19368	18.1100	0.2216	5.3700e-003	25.2493
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>74.6257</b>	<b>1.1529</b>	<b>0.0278</b>	<b>111.7169</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.5505	3.2829	0.0000	137.6240
Unmitigated	55.5505	3.2829	0.0000	137.6240



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.28	0.0568	3.3600e-003	0.0000	0.1408
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	136.88	27.7854	1.6421	0.0000	68.8372
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	136.5	27.7083	1.6375	0.0000	68.6461
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>55.5505</b>	<b>3.2829</b>	<b>0.0000</b>	<b>137.6240</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.28	0.0568	3.3600e-003	0.0000	0.1408
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	136.88	27.7854	1.6421	0.0000	68.8372
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	136.5	27.7083	1.6375	0.0000	68.6461
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>55.5505</b>	<b>3.2829</b>	<b>0.0000</b>	<b>137.6240</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0354	0.1577	0.6313	3.8600e-003		0.0490	0.0490		0.0490	0.0490	0.0000	701.2124	701.2124	0.0134	0.0000	701.5484
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0786</b>	<b>0.3507</b>	<b>0.7413</b>	<b>4.0700e-003</b>		<b>0.0553</b>	<b>0.0553</b>		<b>0.0553</b>	<b>0.0553</b>	<b>0.0000</b>	<b>721.2477</b>	<b>721.2477</b>	<b>0.0163</b>	<b>0.0000</b>	<b>721.6539</b>

**11.0 Vegetation**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-400.8300	0.0000	0.0000	-400.8300

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 139	-400.8300	0.0000	0.0000	-400.8300
<b>Total</b>		<b>-400.8300</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-400.8300</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

tblConstructionPhase	PhaseEndDate	9/22/2023	7/2/2020
tblConstructionPhase	PhaseStartDate	7/1/2023	7/1/2020
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2040

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0905	0.0560	0.6816	1.6100e-003	542.1356	1.0500e-003	542.1367	297.9597	9.7000e-004	297.9607	0.0000	160.2562	160.2562	5.6800e-003	0.0000	160.3982
Maximum	0.0905	0.0560	0.6816	1.6100e-003	542.1356	1.0500e-003	542.1367	297.9597	9.7000e-004	297.9607	0.0000	160.2562	160.2562	5.6800e-003	0.0000	160.3982

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0905	0.0560	0.6816	1.6100e-003	244.0424	1.0500e-003	244.0434	134.1034	9.7000e-004	134.1044	0.0000	160.2562	160.2562	5.6800e-003	0.0000	160.3982
Maximum	0.0905	0.0560	0.6816	1.6100e-003	244.0424	1.0500e-003	244.0434	134.1034	9.7000e-004	134.1044	0.0000	160.2562	160.2562	5.6800e-003	0.0000	160.3982

	ROG	NOx	CO	SO2	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	54.98	0.00	54.98	54.99	0.00	54.99	0.00	0.00	0.00	0.00	0.00	0.00



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Energy	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
Mobile	29.0851	216.3986	215.2200	1.0549	62.9575	0.6204	63.5779	16.8487	0.5805	17.4292		107,919.7829	107,919.7829	6.5557		108,083.6765
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>48.9624</b>	<b>251.1197</b>	<b>239.0498</b>	<b>1.1208</b>	<b>62.9575</b>	<b>2.0765</b>	<b>65.0340</b>	<b>16.8487</b>	<b>2.0367</b>	<b>18.8853</b>		<b>117,846.9884</b>	<b>117,846.9884</b>	<b>7.1949</b>	<b>0.0368</b>	<b>118,037.8410</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**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	lb/day										lb/day					
Area	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Energy	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
Mobile	29.0851	216.3986	215.2200	1.0549	62.9575	0.6204	63.5779	16.8487	0.5805	17.4292		107,919.7829	107,919.7829	6.5557		108,083.6765
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>48.9624</b>	<b>251.1197</b>	<b>239.0498</b>	<b>1.1208</b>	<b>62.9575</b>	<b>2.0765</b>	<b>65.0340</b>	<b>16.8487</b>	<b>2.0367</b>	<b>18.8853</b>		<b>117,846.9884</b>	<b>117,846.9884</b>	<b>7.1949</b>	<b>0.0368</b>	<b>118,037.8410</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2020	7/2/2020	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					541.9878	0.0000	541.9878	297.9205	0.0000	297.9205			0.0000			0.0000
<b>Total</b>					<b>541.9878</b>	<b>0.0000</b>	<b>541.9878</b>	<b>297.9205</b>	<b>0.0000</b>	<b>297.9205</b>			<b>0.0000</b>			<b>0.0000</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0905	0.0560	0.6816	1.6100e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		160.2562	160.2562	5.6800e-003		160.3982
<b>Total</b>	<b>0.0905</b>	<b>0.0560</b>	<b>0.6816</b>	<b>1.6100e-003</b>	<b>0.1479</b>	<b>1.0500e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.7000e-004</b>	<b>0.0402</b>		<b>160.2562</b>	<b>160.2562</b>	<b>5.6800e-003</b>		<b>160.3982</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					243.8945	0.0000	243.8945	134.0642	0.0000	134.0642			0.0000			0.0000
<b>Total</b>					<b>243.8945</b>	<b>0.0000</b>	<b>243.8945</b>	<b>134.0642</b>	<b>0.0000</b>	<b>134.0642</b>			<b>0.0000</b>			<b>0.0000</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0905	0.0560	0.6816	1.6100e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		160.2562	160.2562	5.6800e-003		160.3982
<b>Total</b>	<b>0.0905</b>	<b>0.0560</b>	<b>0.6816</b>	<b>1.6100e-003</b>	<b>0.1479</b>	<b>1.0500e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.7000e-004</b>	<b>0.0402</b>		<b>160.2562</b>	<b>160.2562</b>	<b>5.6800e-003</b>		<b>160.3982</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	29.0851	216.3986	215.2200	1.0549	62.9575	0.6204	63.5779	16.8487	0.5805	17.4292		107,919.7829	107,919.7829	6.5557		108,083.6765
Unmitigated	29.0851	216.3986	215.2200	1.0549	62.9575	0.6204	63.5779	16.8487	0.5805	17.4292		107,919.7829	107,919.7829	6.5557		108,083.6765

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	5,551.00	6,496.10	3281.20	9,400,795	9,400,795
User Defined Recreational	0.00	0.00	0.00		
Total	13,509.46	16,043.56	10,981.66	24,784,204	24,784,204

**4.3 Trip Type Information**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
NaturalGas Unmitigated	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**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	lb/day										lb/day					
Arena	578.564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	413.26	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6189	48.6189	9.3000e-004	8.9000e-004	48.9078
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
Regional Shopping Center	3825.21	0.0413	0.3750	0.3150	2.2500e-003		0.0285	0.0285		0.0285	0.0285		450.0242	450.0242	8.6300e-003	8.2500e-003	452.6984
User Defined Recreational	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
<b>Total</b>		<b>0.1842</b>	<b>1.6747</b>	<b>1.4068</b>	<b>0.0100</b>		<b>0.1273</b>	<b>0.1273</b>		<b>0.1273</b>	<b>0.1273</b>		<b>2,009.6564</b>	<b>2,009.6564</b>	<b>0.0385</b>	<b>0.0368</b>	<b>2,021.5988</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	0.578564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12.265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	0.41326	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6189	48.6189	9.3000e-004	8.9000e-004	48.9078
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
Regional Shopping Center	3.82521	0.0413	0.3750	0.3150	2.2500e-003		0.0285	0.0285		0.0285	0.0285		450.0242	450.0242	8.6300e-003	8.2500e-003	452.6984
User Defined Recreational	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
<b>Total</b>		<b>0.1842</b>	<b>1.6747</b>	<b>1.4068</b>	<b>0.0100</b>		<b>0.1273</b>	<b>0.1273</b>		<b>0.1273</b>	<b>0.1273</b>		<b>2,009.6564</b>	<b>2,009.6564</b>	<b>0.0385</b>	<b>0.0368</b>	<b>2,021.5988</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Unmitigated	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0565	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
<b>Total</b>	<b>12.3038</b>	<b>5.5500e-003</b>	<b>0.6179</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4300e-003</b>		<b>1.4188</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0565	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
<b>Total</b>	<b>12.3038</b>	<b>5.5500e-003</b>	<b>0.6179</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4300e-003</b>		<b>1.4188</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.29	10,080.00	0
Hotel	250.00	Room	5.02	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.04	7,200.00	0
User Defined Recreational	150.33	User Defined Unit	4.25	150,326.00	0
Regional Shopping Center	130.00	1000sqft	3.68	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

tblConstructionPhase	PhaseEndDate	9/22/2023	7/2/2020
tblConstructionPhase	PhaseStartDate	7/1/2023	7/1/2020
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	7,200.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	7,200.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.29
tblLandUse	LotAcreage	8.33	5.02
tblLandUse	LotAcreage	1.70	2.04
tblLandUse	LotAcreage	0.00	4.25
tblLandUse	LotAcreage	2.98	3.68
tblProjectCharacteristics	OperationalYear	2018	2040

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0793	0.0669	0.5731	1.4000e-003	542.1356	1.0500e-003	542.1367	297.9597	9.7000e-004	297.9607	0.0000	138.9595	138.9595	4.8800e-003	0.0000	139.0816
Maximum	0.0793	0.0669	0.5731	1.4000e-003	542.1356	1.0500e-003	542.1367	297.9597	9.7000e-004	297.9607	0.0000	138.9595	138.9595	4.8800e-003	0.0000	139.0816

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	0.0793	0.0669	0.5731	1.4000e-003	244.0424	1.0500e-003	244.0434	134.1034	9.7000e-004	134.1044	0.0000	138.9595	138.9595	4.8800e-003	0.0000	139.0816
Maximum	0.0793	0.0669	0.5731	1.4000e-003	244.0424	1.0500e-003	244.0434	134.1034	9.7000e-004	134.1044	0.0000	138.9595	138.9595	4.8800e-003	0.0000	139.0816

	ROG	NOx	CO	SO2	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	54.98	0.00	54.98	54.99	0.00	54.99	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Energy	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
Mobile	20.7208	217.5635	207.2659	0.9602	62.9575	0.6274	63.5849	16.8487	0.5873	17.4359		98,303.1550	98,303.1550	7.1797		98,482.6464
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>40.5981</b>	<b>252.2845</b>	<b>231.0958</b>	<b>1.0260</b>	<b>62.9575</b>	<b>2.0836</b>	<b>65.0411</b>	<b>16.8487</b>	<b>2.0434</b>	<b>18.8921</b>		<b>108,230.3605</b>	<b>108,230.3605</b>	<b>7.8188</b>	<b>0.0368</b>	<b>108,436.8109</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**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	lb/day										lb/day					
Area	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Energy	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
Mobile	20.7208	217.5635	207.2659	0.9602	62.9575	0.6274	63.5849	16.8487	0.5873	17.4359		98,303.1550	98,303.1550	7.1797		98,482.6464
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>40.5981</b>	<b>252.2845</b>	<b>231.0958</b>	<b>1.0260</b>	<b>62.9575</b>	<b>2.0836</b>	<b>65.0411</b>	<b>16.8487</b>	<b>2.0434</b>	<b>18.8921</b>		<b>108,230.3605</b>	<b>108,230.3605</b>	<b>7.8188</b>	<b>0.0368</b>	<b>108,436.8109</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2020	7/2/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.2 Site Preparation - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					541.9878	0.0000	541.9878	297.9205	0.0000	297.9205			0.0000			0.0000
<b>Total</b>					<b>541.9878</b>	<b>0.0000</b>	<b>541.9878</b>	<b>297.9205</b>	<b>0.0000</b>	<b>297.9205</b>			<b>0.0000</b>			<b>0.0000</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0793	0.0669	0.5731	1.4000e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		138.9595	138.9595	4.8800e-003		139.0816
<b>Total</b>	<b>0.0793</b>	<b>0.0669</b>	<b>0.5731</b>	<b>1.4000e-003</b>	<b>0.1479</b>	<b>1.0500e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.7000e-004</b>	<b>0.0402</b>		<b>138.9595</b>	<b>138.9595</b>	<b>4.8800e-003</b>		<b>139.0816</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**3.2 Site Preparation - 2020****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					243.8945	0.0000	243.8945	134.0642	0.0000	134.0642			0.0000			0.0000
<b>Total</b>					<b>243.8945</b>	<b>0.0000</b>	<b>243.8945</b>	<b>134.0642</b>	<b>0.0000</b>	<b>134.0642</b>			<b>0.0000</b>			<b>0.0000</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0793	0.0669	0.5731	1.4000e-003	0.1479	1.0500e-003	0.1489	0.0392	9.7000e-004	0.0402		138.9595	138.9595	4.8800e-003		139.0816
<b>Total</b>	<b>0.0793</b>	<b>0.0669</b>	<b>0.5731</b>	<b>1.4000e-003</b>	<b>0.1479</b>	<b>1.0500e-003</b>	<b>0.1489</b>	<b>0.0392</b>	<b>9.7000e-004</b>	<b>0.0402</b>		<b>138.9595</b>	<b>138.9595</b>	<b>4.8800e-003</b>		<b>139.0816</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.7208	217.5635	207.2659	0.9602	62.9575	0.6274	63.5849	16.8487	0.5873	17.4359		98,303.15 50	98,303.15 50	7.1797		98,482.64 64
Unmitigated	20.7208	217.5635	207.2659	0.9602	62.9575	0.6274	63.5849	16.8487	0.5873	17.4359		98,303.15 50	98,303.15 50	7.1797		98,482.64 64

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	5,551.00	6,496.10	3281.20	9,400,795	9,400,795
User Defined Recreational	0.00	0.00	0.00		
Total	13,509.46	16,043.56	10,981.66	24,784,204	24,784,204

**4.3 Trip Type Information**



## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988
NaturalGas Unmitigated	0.1842	1.6747	1.4068	0.0101		0.1273	0.1273		0.1273	0.1273		2,009.6564	2,009.6564	0.0385	0.0368	2,021.5988

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**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	lb/day										lb/day					
Arena	578.564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	413.26	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6189	48.6189	9.3000e-004	8.9000e-004	48.9078
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
Regional Shopping Center	3825.21	0.0413	0.3750	0.3150	2.2500e-003		0.0285	0.0285		0.0285	0.0285		450.0242	450.0242	8.6300e-003	8.2500e-003	452.6984
User Defined Recreational	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
<b>Total</b>		<b>0.1842</b>	<b>1.6747</b>	<b>1.4068</b>	<b>0.0100</b>		<b>0.1273</b>	<b>0.1273</b>		<b>0.1273</b>	<b>0.1273</b>		<b>2,009.6564</b>	<b>2,009.6564</b>	<b>0.0385</b>	<b>0.0368</b>	<b>2,021.5988</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	0.578564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12.265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	0.41326	4.4600e-003	0.0405	0.0340	2.4000e-004		3.0800e-003	3.0800e-003		3.0800e-003	3.0800e-003		48.6189	48.6189	9.3000e-004	8.9000e-004	48.9078
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
Regional Shopping Center	3.82521	0.0413	0.3750	0.3150	2.2500e-003		0.0285	0.0285		0.0285	0.0285		450.0242	450.0242	8.6300e-003	8.2500e-003	452.6984
User Defined Recreational	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
<b>Total</b>		<b>0.1842</b>	<b>1.6747</b>	<b>1.4068</b>	<b>0.0100</b>		<b>0.1273</b>	<b>0.1273</b>		<b>0.1273</b>	<b>0.1273</b>		<b>2,009.6564</b>	<b>2,009.6564</b>	<b>0.0385</b>	<b>0.0368</b>	<b>2,021.5988</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
Unmitigated	12.3038	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0565	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
<b>Total</b>	<b>12.3038</b>	<b>5.5500e-003</b>	<b>0.6179</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4300e-003</b>		<b>1.4188</b>

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	10.3711					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0565	5.5500e-003	0.6179	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3329	1.3329	3.4300e-003		1.4188
<b>Total</b>	<b>12.3038</b>	<b>5.5500e-003</b>	<b>0.6179</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3329</b>	<b>1.3329</b>	<b>3.4300e-003</b>		<b>1.4188</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative A - Shasta County, Winter

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative A

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												

### Fugitive Dust Mitigation

Yes/No    Mitigation Measure    Mitigation Input    Mitigation Input    Mitigation Input

Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.54	0.30	0.24	0.13	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	27.81	28.08	29.60	29.54	28.59
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.45		

No	Land Use	Improve Walkability Design	0.00		
No	Land Use	Improve Destination Accessibility	0.00		
No	Land Use	Increase Transit Accessibility	0.25		
No	Land Use	Integrate Below Market Rate Housing	0.00		
	Land Use	Land Use SubTotal	0.00		
No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			

No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		
No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

### Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

### Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

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## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data



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Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150

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tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 1
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	209.00
tblConstructionPhase	NumDays	1,110.00	272.00
tblConstructionPhase	NumDays	110.00	65.00
tblConstructionPhase	NumDays	75.00	76.00
tblConstructionPhase	NumDays	40.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00

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tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	12.17
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	0.12
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	162.50	275.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00

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tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,234.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00

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tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	10.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PR_TP	66.00	90.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	0.00	33.67

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tblWater	IndoorWaterUseRate	4,342,162.79	4,520,822.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,527,735.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,888,860.00
tblWater	IndoorWaterUseRate	0.00	31,791,583.00
tblWater	OutdoorWaterUseRate	277,159.33	205,457.00
tblWater	OutdoorWaterUseRate	704,632.50	751,132.00
tblWater	OutdoorWaterUseRate	1,903,334.59	494,863.00
tblWater	OutdoorWaterUseRate	0.00	1,444,824.00

## 2.0 Emissions Summary

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**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.3134	3.2925	2.0307	4.1600e-003	0.8038	0.1477	0.9514	0.3619	0.1362	0.4981	0.0000	375.5479	375.5479	0.0939	0.0000	377.8963
2020	3.7245	5.8141	5.3559	0.0154	0.6121	0.1972	0.8093	0.1661	0.1857	0.3518	0.0000	1,396.3726	1,396.3726	0.1581	0.0000	1,400.3246
Maximum	3.7245	5.8141	5.3559	0.0154	0.8038	0.1972	0.9514	0.3619	0.1857	0.4981	0.0000	1,396.3726	1,396.3726	0.1581	0.0000	1,400.3246

**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					
2019	0.1588	2.1939	2.1663	4.1600e-003	0.3924	0.0442	0.4365	0.1712	0.0414	0.2126	0.0000	375.5476	375.5476	0.0939	0.0000	377.8959
2020	3.4944	5.0547	5.5846	0.0154	0.6121	0.0470	0.6591	0.1661	0.0461	0.2122	0.0000	1,396.3721	1,396.3721	0.1581	0.0000	1,400.3242
Maximum	3.4944	5.0547	5.5846	0.0154	0.6121	0.0470	0.6591	0.1712	0.0461	0.2126	0.0000	1,396.3721	1,396.3721	0.1581	0.0000	1,400.3242

	ROG	NOx	CO	SO2	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	9.53	20.40	-4.93	0.00	29.06	73.58	37.78	36.13	72.82	50.02	0.00	0.00	0.00	0.00	0.00	0.00



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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.7456	0.9230
2	10-1-2019	12-31-2019	1.8507	1.4302
3	1-1-2020	3-31-2020	1.6653	1.4540
4	4-1-2020	6-30-2020	2.8502	2.5477
5	7-1-2020	9-30-2020	2.7845	2.4987
		Highest	2.8502	2.5477

## 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	1.9402	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134
Energy	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	533.3185	533.3185	0.0241	5.0000e-003	535.4101
Mobile	3.2190	28.5743	42.9138	0.2173	16.2155	0.1714	16.3869	4.3617	0.1610	4.5226	0.0000	20,090.7281	20,090.7281	0.7145	0.0000	20,108.5913
Stationary	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
Waste						0.0000	0.0000		0.0000	0.0000	250.4909	0.0000	250.4909	14.8036	0.0000	620.5805
Water						0.0000	0.0000		0.0000	0.0000	20.2183	103.2662	123.4845	2.0813	0.0500	190.4163
<b>Total</b>	<b>5.2024</b>	<b>28.7687</b>	<b>43.0792</b>	<b>0.2175</b>	<b>16.2155</b>	<b>0.1780</b>	<b>16.3935</b>	<b>4.3617</b>	<b>0.1676</b>	<b>4.5292</b>	<b>270.7091</b>	<b>20,747.4546</b>	<b>21,018.1637</b>	<b>17.6266</b>	<b>0.0550</b>	<b>21,475.2171</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9402	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134
Energy	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	533.3185	533.3185	0.0241	5.0000e-003	535.4101
Mobile	3.2190	28.5743	42.9138	0.2173	16.2155	0.1714	16.3869	4.3617	0.1610	4.5226	0.0000	20,090.7281	20,090.7281	0.7145	0.0000	20,108.5913
Stationary	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
Waste						0.0000	0.0000		0.0000	0.0000	250.4909	0.0000	250.4909	14.8036	0.0000	620.5805
Water						0.0000	0.0000		0.0000	0.0000	14.2337	73.2184	87.4521	1.4652	0.0352	134.5741
<b>Total</b>	<b>5.2024</b>	<b>28.7687</b>	<b>43.0792</b>	<b>0.2175</b>	<b>16.2155</b>	<b>0.1780</b>	<b>16.3935</b>	<b>4.3617</b>	<b>0.1676</b>	<b>4.5292</b>	<b>264.7245</b>	<b>20,717.4068</b>	<b>20,982.1313</b>	<b>17.0105</b>	<b>0.0402</b>	<b>21,419.3749</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.21</b>	<b>0.14</b>	<b>0.17</b>	<b>3.49</b>	<b>26.91</b>	<b>0.26</b>

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**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-318.9400
<b>Total</b>	<b>-318.9400</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 275****Acres of Paving: 64.96**

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**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 614,660; Non-Residential Outdoor: 204,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	417.00	163.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	83.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0975	1.0254	0.4964	8.5000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0975</b>	<b>1.0254</b>	<b>0.4964</b>	<b>8.5000e-004</b>	<b>0.4065</b>	<b>0.0538</b>	<b>0.4603</b>	<b>0.2234</b>	<b>0.0495</b>	<b>0.2729</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**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					0.1829	0.0000	0.1829	0.1006	0.0000	0.1006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.4290	0.5166	8.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0210</b>	<b>0.4290</b>	<b>0.5166</b>	<b>8.5000e-004</b>	<b>0.1829</b>	<b>3.1900e-003</b>	<b>0.1861</b>	<b>0.1006</b>	<b>3.1900e-003</b>	<b>0.1037</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

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**3.2 Site Preparation - 2019****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	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3415	0.0000	0.3415	0.1233	0.0000	0.1233	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e-003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
<b>Total</b>	<b>0.1540</b>	<b>1.7719</b>	<b>1.0847</b>	<b>2.0200e-003</b>	<b>0.3415</b>	<b>0.0774</b>	<b>0.4190</b>	<b>0.1233</b>	<b>0.0712</b>	<b>0.1946</b>	<b>0.0000</b>	<b>181.0293</b>	<b>181.0293</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4612</b>

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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**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					0.1537	0.0000	0.1537	0.0555	0.0000	0.0555	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0945	1.3452	1.1924	2.0200e-003		0.0366	0.0366		0.0339	0.0339	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
<b>Total</b>	<b>0.0945</b>	<b>1.3452</b>	<b>1.1924</b>	<b>2.0200e-003</b>	<b>0.1537</b>	<b>0.0366</b>	<b>0.1903</b>	<b>0.0555</b>	<b>0.0339</b>	<b>0.0894</b>	<b>0.0000</b>	<b>181.0291</b>	<b>181.0291</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4610</b>



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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2319	0.1888	3.0000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	25.8615	25.8615	6.3000e-003	0.0000	26.0190
<b>Total</b>	<b>0.0260</b>	<b>0.2319</b>	<b>0.1888</b>	<b>3.0000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0133</b>	<b>0.0133</b>	<b>0.0000</b>	<b>25.8615</b>	<b>25.8615</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0190</b>

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**3.4 Building Construction - 2019****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	9.6600e-003	0.2417	0.0563	5.2000e-004	0.0117	1.9000e-003	0.0136	3.3800e-003	1.8200e-003	5.2000e-003	0.0000	49.6173	49.6173	4.3700e-003	0.0000	49.7266
Worker	0.0213	0.0176	0.1662	3.8000e-004	0.0358	2.8000e-004	0.0361	9.5400e-003	2.6000e-004	9.8000e-003	0.0000	34.2767	34.2767	1.3500e-003	0.0000	34.3105
<b>Total</b>	<b>0.0310</b>	<b>0.2593</b>	<b>0.2225</b>	<b>9.0000e-004</b>	<b>0.0475</b>	<b>2.1800e-003</b>	<b>0.0497</b>	<b>0.0129</b>	<b>2.0800e-003</b>	<b>0.0150</b>	<b>0.0000</b>	<b>83.8940</b>	<b>83.8940</b>	<b>5.7200e-003</b>	<b>0.0000</b>	<b>84.0371</b>

**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	7.4100e-003	0.1565	0.1966	3.0000e-004		2.1700e-003	2.1700e-003		2.1700e-003	2.1700e-003	0.0000	25.8614	25.8614	6.3000e-003	0.0000	26.0189
<b>Total</b>	<b>7.4100e-003</b>	<b>0.1565</b>	<b>0.1966</b>	<b>3.0000e-004</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>	<b>0.0000</b>	<b>25.8614</b>	<b>25.8614</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0189</b>

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**3.4 Building Construction - 2019****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	9.6600e-003	0.2417	0.0563	5.2000e-004	0.0117	1.9000e-003	0.0136	3.3800e-003	1.8200e-003	5.2000e-003	0.0000	49.6173	49.6173	4.3700e-003	0.0000	49.7266
Worker	0.0213	0.0176	0.1662	3.8000e-004	0.0358	2.8000e-004	0.0361	9.5400e-003	2.6000e-004	9.8000e-003	0.0000	34.2767	34.2767	1.3500e-003	0.0000	34.3105
<b>Total</b>	<b>0.0310</b>	<b>0.2593</b>	<b>0.2225</b>	<b>9.0000e-004</b>	<b>0.0475</b>	<b>2.1800e-003</b>	<b>0.0497</b>	<b>0.0129</b>	<b>2.0800e-003</b>	<b>0.0150</b>	<b>0.0000</b>	<b>83.8940</b>	<b>83.8940</b>	<b>5.7200e-003</b>	<b>0.0000</b>	<b>84.0371</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2650	2.3983	2.1061	3.3600e-003		0.1396	0.1396		0.1313	0.1313	0.0000	289.5125	289.5125	0.0706	0.0000	291.2783
<b>Total</b>	<b>0.2650</b>	<b>2.3983</b>	<b>2.1061</b>	<b>3.3600e-003</b>		<b>0.1396</b>	<b>0.1396</b>		<b>0.1313</b>	<b>0.1313</b>	<b>0.0000</b>	<b>289.5125</b>	<b>289.5125</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2783</b>

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**3.4 Building Construction - 2020****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	0.0888	2.5006	0.5554	5.9100e-003	0.1326	0.0138	0.1464	0.0384	0.0132	0.0516	0.0000	559.9811	559.9811	0.0454	0.0000	561.1162
Worker	0.2169	0.1740	1.6531	4.1800e-003	0.4073	3.0500e-003	0.4103	0.1085	2.8100e-003	0.1113	0.0000	377.2001	377.2001	0.0131	0.0000	377.5264
<b>Total</b>	<b>0.3057</b>	<b>2.6746</b>	<b>2.2085</b>	<b>0.0101</b>	<b>0.5399</b>	<b>0.0169</b>	<b>0.5567</b>	<b>0.1469</b>	<b>0.0160</b>	<b>0.1629</b>	<b>0.0000</b>	<b>937.1812</b>	<b>937.1812</b>	<b>0.0585</b>	<b>0.0000</b>	<b>938.6426</b>

**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	0.0842	1.7783	2.2342	3.3600e-003		0.0246	0.0246		0.0246	0.0246	0.0000	289.5121	289.5121	0.0706	0.0000	291.2779
<b>Total</b>	<b>0.0842</b>	<b>1.7783</b>	<b>2.2342</b>	<b>3.3600e-003</b>		<b>0.0246</b>	<b>0.0246</b>		<b>0.0246</b>	<b>0.0246</b>	<b>0.0000</b>	<b>289.5121</b>	<b>289.5121</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2779</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0888	2.5006	0.5554	5.9100e-003	0.1326	0.0138	0.1464	0.0384	0.0132	0.0516	0.0000	559.9811	559.9811	0.0454	0.0000	561.1162
Worker	0.2169	0.1740	1.6531	4.1800e-003	0.4073	3.0500e-003	0.4103	0.1085	2.8100e-003	0.1113	0.0000	377.2001	377.2001	0.0131	0.0000	377.5264
<b>Total</b>	<b>0.3057</b>	<b>2.6746</b>	<b>2.2085</b>	<b>0.0101</b>	<b>0.5399</b>	<b>0.0169</b>	<b>0.5567</b>	<b>0.1469</b>	<b>0.0160</b>	<b>0.1629</b>	<b>0.0000</b>	<b>937.1812</b>	<b>937.1812</b>	<b>0.0585</b>	<b>0.0000</b>	<b>938.6426</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.5345	0.5568	8.7000e-004		0.0286	0.0286		0.0263	0.0263	0.0000	76.1072	76.1072	0.0246	0.0000	76.7226
Paving	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1194</b>	<b>0.5345</b>	<b>0.5568</b>	<b>8.7000e-004</b>		<b>0.0286</b>	<b>0.0286</b>		<b>0.0263</b>	<b>0.0263</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7226</b>

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**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**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	0.0213	0.4292	0.6572	8.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	76.1072	76.1072	0.0246	0.0000	76.7225
Paving	0.0679					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0892</b>	<b>0.4292</b>	<b>0.6572</b>	<b>8.7000e-004</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7225</b>

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**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.9707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0253	0.1760	0.1914	3.1000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7332
<b>Total</b>	<b>2.9960</b>	<b>0.1760</b>	<b>0.1914</b>	<b>3.1000e-004</b>		<b>0.0116</b>	<b>0.0116</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7332</b>

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**3.6 Architectural Coating - 2020****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	0.0361	0.0290	0.2751	7.0000e-004	0.0678	5.1000e-004	0.0683	0.0181	4.7000e-004	0.0185	0.0000	62.7654	62.7654	2.1700e-003	0.0000	62.8197
<b>Total</b>	<b>0.0361</b>	<b>0.0290</b>	<b>0.2751</b>	<b>7.0000e-004</b>	<b>0.0678</b>	<b>5.1000e-004</b>	<b>0.0683</b>	<b>0.0181</b>	<b>4.7000e-004</b>	<b>0.0185</b>	<b>0.0000</b>	<b>62.7654</b>	<b>62.7654</b>	<b>2.1700e-003</b>	<b>0.0000</b>	<b>62.8197</b>

**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	2.9707					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2100e-003	0.1418	0.1915	3.1000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7331
<b>Total</b>	<b>2.9769</b>	<b>0.1418</b>	<b>0.1915</b>	<b>3.1000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7331</b>



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**3.6 Architectural Coating - 2020****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	0.0361	0.0290	0.2751	7.0000e-004	0.0678	5.1000e-004	0.0683	0.0181	4.7000e-004	0.0185	0.0000	62.7654	62.7654	2.1700e-003	0.0000	62.8197
<b>Total</b>	<b>0.0361</b>	<b>0.0290</b>	<b>0.2751</b>	<b>7.0000e-004</b>	<b>0.0678</b>	<b>5.1000e-004</b>	<b>0.0683</b>	<b>0.0181</b>	<b>4.7000e-004</b>	<b>0.0185</b>	<b>0.0000</b>	<b>62.7654</b>	<b>62.7654</b>	<b>2.1700e-003</b>	<b>0.0000</b>	<b>62.8197</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	3.2190	28.5743	42.9138	0.2173	16.2155	0.1714	16.3869	4.3617	0.1610	4.5226	0.0000	20,090.7281	20,090.7281	0.7145	0.0000	20,108.5913
Unmitigated	3.2190	28.5743	42.9138	0.2173	16.2155	0.1714	16.3869	4.3617	0.1610	4.5226	0.0000	20,090.7281	20,090.7281	0.7145	0.0000	20,108.5913

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	2,830,337	2,830,337
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	5,061.61	5,061.61	5,061.61	35,094,539	35,094,539
Total	7,006.07	7,006.07	7,006.07	43,673,421	43,673,421

## 4.3 Trip Type Information

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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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	90	10	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	532.3880	532.3880	0.0241	4.9800e-003	534.4740
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	532.3880	532.3880	0.0241	4.9800e-003	534.4740
NaturalGas Mitigated	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9306	0.9306	2.0000e-005	2.0000e-005	0.9361
NaturalGas Unmitigated	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9306	0.9306	2.0000e-005	2.0000e-005	0.9361

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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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	17437.8	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9306	0.9306	2.0000e-005	2.0000e-005	0.9361
<b>Total</b>		<b>9.0000e-005</b>	<b>8.5000e-004</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.9306</b>	<b>0.9306</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9361</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	17437.8	9.0000e-005	8.5000e-004	7.2000e-004	1.0000e-005		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.9306	0.9306	2.0000e-005	2.0000e-005	0.9361
<b>Total</b>		<b>9.0000e-005</b>	<b>8.5000e-004</b>	<b>7.2000e-004</b>	<b>1.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.9306</b>	<b>0.9306</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9361</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.83007e+006	532.3880	0.0241	4.9800e-003	534.4740
<b>Total</b>		<b>532.3880</b>	<b>0.0241</b>	<b>4.9800e-003</b>	<b>534.4740</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.83007e+006	532.3880	0.0241	4.9800e-003	534.4740
<b>Total</b>		<b>532.3880</b>	<b>0.0241</b>	<b>4.9800e-003</b>	<b>534.4740</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.9402	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134
Unmitigated	1.9402	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134

## 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	0.2971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0300e-003	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134
<b>Total</b>	<b>1.9402</b>	<b>4.9000e-004</b>	<b>0.0546</b>	<b>0.0000</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.1065</b>	<b>0.1065</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1134</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**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	0.2971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0300e-003	4.9000e-004	0.0546	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.8000e-004	0.0000	0.1134
<b>Total</b>	<b>1.9402</b>	<b>4.9000e-004</b>	<b>0.0546</b>	<b>0.0000</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.1065</b>	<b>0.1065</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1134</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	87.4521	1.4652	0.0352	134.5741
Unmitigated	123.4845	2.0813	0.0500	190.4163

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.52082 / 0.205457	8.7598	0.1476	3.5500e-003	13.5078
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	16.5277 / 0.751132	32.0250	0.5398	0.0130	49.3833
Movie Theater (No Matinee)	10.8889 / 0.494863	21.0988	0.3556	8.5400e-003	32.5349
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	31.7916 / 1.44482	61.6009	1.0383	0.0249	94.9903
<b>Total</b>		<b>123.4845</b>	<b>2.0813</b>	<b>0.0500</b>	<b>190.4163</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.18266 / 0.180802	6.2037	0.1039	2.5000e-003	9.5465
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	11.6355 / 0.660996	22.6802	0.3800	9.1300e-003	34.9010
Movie Theater (No Matinee)	7.66576 / 0.435479	14.9422	0.2504	6.0200e-003	22.9936
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	22.3813 / 1.27145	43.6260	0.7310	0.0176	67.1331
<b>Total</b>		<b>87.4521</b>	<b>1.4652</b>	<b>0.0352</b>	<b>134.5741</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	250.4909	14.8036	0.0000	620.5805
Unmitigated	250.4909	14.8036	0.0000	620.5805

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1234	250.4909	14.8036	0.0000	620.5805
<b>Total</b>		<b>250.4909</b>	<b>14.8036</b>	<b>0.0000</b>	<b>620.5805</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1234	250.4909	14.8036	0.0000	620.5805
<b>Total</b>		<b>250.4909</b>	<b>14.8036</b>	<b>0.0000</b>	<b>620.5805</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

User Defined Equipment

Equipment Type	Number
----------------	--------

## 10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0432</b>	<b>0.1931</b>	<b>0.1101</b>	<b>2.1000e-004</b>		<b>6.3500e-003</b>	<b>6.3500e-003</b>		<b>6.3500e-003</b>	<b>6.3500e-003</b>	<b>0.0000</b>	<b>20.0353</b>	<b>20.0353</b>	<b>2.8100e-003</b>	<b>0.0000</b>	<b>20.1055</b>

## 11.0 Vegetation



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-318.9400	0.0000	0.0000	-318.9400

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 158	-318.9400	0.0000	0.0000	-318.9400
<b>Total</b>		<b>-318.9400</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-318.9400</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative B

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 1
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	209.00
tblConstructionPhase	NumDays	1,110.00	272.00
tblConstructionPhase	NumDays	110.00	65.00
tblConstructionPhase	NumDays	75.00	76.00
tblConstructionPhase	NumDays	40.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	12.17
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	0.12
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	162.50	275.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,234.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	10.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PR_TP	66.00	90.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	0.00	33.67



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblWater	IndoorWaterUseRate	4,342,162.79	4,520,822.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,527,735.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,888,860.00
tblWater	IndoorWaterUseRate	0.00	31,791,583.00
tblWater	OutdoorWaterUseRate	277,159.33	205,457.00
tblWater	OutdoorWaterUseRate	704,632.50	751,132.00
tblWater	OutdoorWaterUseRate	1,903,334.59	494,863.00
tblWater	OutdoorWaterUseRate	0.00	1,444,824.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.5731	54.5914	39.8800	0.1137	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	11,466.1045	11,466.1045	1.9500	0.0000	11,496.1548
2020	37.2214	56.1900	56.9395	0.1467	5.3353	2.1203	7.4556	1.4402	1.9863	3.4265	0.0000	14,634.9308	14,634.9308	1.9008	0.0000	14,682.4494
Maximum	37.2214	56.1900	56.9395	0.1467	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	14,634.9308	14,634.9308	1.9500	0.0000	14,682.4494

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.8858	41.4610	40.5900	0.1137	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	11,466.1045	11,466.1045	1.9500	0.0000	11,496.1548
2020	34.7971	48.1328	60.6094	0.1467	5.3353	0.4421	5.7774	1.4402	0.4350	1.8752	0.0000	14,634.9308	14,634.9308	1.9008	0.0000	14,682.4494
Maximum	34.7971	48.1328	60.6094	0.1467	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	14,634.9308	14,634.9308	1.9500	0.0000	14,682.4494

	ROG	NOx	CO	SO2	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	9.61	19.13	-4.52	0.00	42.19	65.24	49.40	47.87	64.65	58.16	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Energy	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
Mobile	21.3542	152.4743	277.1011	1.2748	93.5508	0.9416	94.4924	25.0587	0.8843	25.9430		129,758.7523	129,758.7523	4.4190		129,869.2270
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>39.2094</b>	<b>184.6612</b>	<b>296.0584</b>	<b>1.3095</b>	<b>93.5508</b>	<b>2.0026</b>	<b>95.5533</b>	<b>25.0587</b>	<b>1.9453</b>	<b>27.0040</b>		<b>133,446.5269</b>	<b>133,446.5269</b>	<b>4.9386</b>	<b>1.0000e-004</b>	<b>133,570.0213</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**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	lb/day										lb/day					
Area	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Energy	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
Mobile	21.3542	152.4743	277.1011	1.2748	93.5508	0.9416	94.4924	25.0587	0.8843	25.9430		129,758.7523	129,758.7523	4.4190		129,869.2270
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>39.2094</b>	<b>184.6612</b>	<b>296.0584</b>	<b>1.3095</b>	<b>93.5508</b>	<b>2.0026</b>	<b>95.5533</b>	<b>25.0587</b>	<b>1.9453</b>	<b>27.0040</b>		<b>133,446.5269</b>	<b>133,446.5269</b>	<b>4.9386</b>	<b>1.0000e-004</b>	<b>133,570.0213</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 64.96**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 614,660; Non-Residential Outdoor: 204,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	417.00	163.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	83.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.5088	0.0000	10.5088	3.7947	0.0000	3.7947			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>10.5088</b>	<b>2.3827</b>	<b>12.8915</b>	<b>3.7947</b>	<b>2.1920</b>	<b>5.9867</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7290	0.0000	4.7290	1.7076	0.0000	1.7076			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>4.7290</b>	<b>1.1249</b>	<b>5.8539</b>	<b>1.7076</b>	<b>1.0439</b>	<b>2.7515</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8678	21.5400	4.7528	0.0482	1.1047	0.1712	1.2759	0.3181	0.1638	0.4819		5,041.162 4	5,041.162 4	0.4164		5,051.571 6
Worker	2.3441	1.4856	17.9634	0.0386	3.4256	0.0253	3.4508	0.9086	0.0233	0.9319		3,833.361 9	3,833.361 9	0.1543		3,837.219 7
<b>Total</b>	<b>3.2119</b>	<b>23.0256</b>	<b>22.7162</b>	<b>0.0868</b>	<b>4.5302</b>	<b>0.1965</b>	<b>4.7267</b>	<b>1.2267</b>	<b>0.1871</b>	<b>1.4138</b>		<b>8,874.524 3</b>	<b>8,874.524 3</b>	<b>0.5707</b>		<b>8,888.791 3</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1969	0.1969		0.1969	0.1969	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1969</b>	<b>0.1969</b>		<b>0.1969</b>	<b>0.1969</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8678	21.5400	4.7528	0.0482	1.1047	0.1712	1.2759	0.3181	0.1638	0.4819		5,041.162 4	5,041.162 4	0.4164		5,051.571 6
Worker	2.3441	1.4856	17.9634	0.0386	3.4256	0.0253	3.4508	0.9086	0.0233	0.9319		3,833.361 9	3,833.361 9	0.1543		3,837.219 7
<b>Total</b>	<b>3.2119</b>	<b>23.0256</b>	<b>22.7162</b>	<b>0.0868</b>	<b>4.5302</b>	<b>0.1965</b>	<b>4.7267</b>	<b>1.2267</b>	<b>0.1871</b>	<b>1.4138</b>		<b>8,874.524 3</b>	<b>8,874.524 3</b>	<b>0.5707</b>		<b>8,888.791 3</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7005	19.6529	4.1053	0.0479	1.1047	0.1095	1.2141	0.3181	0.1047	0.4228		5,007.577 2	5,007.577 2	0.3796		5,017.067 7
Worker	2.0960	1.2969	15.7912	0.0373	3.4256	0.0244	3.4499	0.9086	0.0225	0.9311		3,712.602 9	3,712.602 9	0.1315		3,715.891 3
<b>Total</b>	<b>2.7965</b>	<b>20.9498</b>	<b>19.8964</b>	<b>0.0852</b>	<b>4.5302</b>	<b>0.1338</b>	<b>4.6641</b>	<b>1.2267</b>	<b>0.1272</b>	<b>1.3539</b>		<b>8,720.180 0</b>	<b>8,720.180 0</b>	<b>0.5112</b>		<b>8,732.959 0</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1969	0.1969		0.1969	0.1969	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1969</b>	<b>0.1969</b>		<b>0.1969</b>	<b>0.1969</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7005	19.6529	4.1053	0.0479	1.1047	0.1095	1.2141	0.3181	0.1047	0.4228		5,007.577 2	5,007.577 2	0.3796		5,017.067 7
Worker	2.0960	1.2969	15.7912	0.0373	3.4256	0.0244	3.4499	0.9086	0.0225	0.9311		3,712.602 9	3,712.602 9	0.1315		3,715.891 3
<b>Total</b>	<b>2.7965</b>	<b>20.9498</b>	<b>19.8964</b>	<b>0.0852</b>	<b>4.5302</b>	<b>0.1338</b>	<b>4.6641</b>	<b>1.2267</b>	<b>0.1272</b>	<b>1.3539</b>		<b>8,720.180 0</b>	<b>8,720.180 0</b>	<b>0.5112</b>		<b>8,732.959 0</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	1.7864					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.1430</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	1.7864					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3474</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.4273					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>28.6695</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4172	0.2581	3.1431	7.4300e-003	0.6818	4.8500e-003	0.6867	0.1809	4.4700e-003	0.1853		738.9593	738.9593	0.0262		739.6139
<b>Total</b>	<b>0.4172</b>	<b>0.2581</b>	<b>3.1431</b>	<b>7.4300e-003</b>	<b>0.6818</b>	<b>4.8500e-003</b>	<b>0.6867</b>	<b>0.1809</b>	<b>4.4700e-003</b>	<b>0.1853</b>		<b>738.9593</b>	<b>738.9593</b>	<b>0.0262</b>		<b>739.6139</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.4273					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>28.4867</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4172	0.2581	3.1431	7.4300e-003	0.6818	4.8500e-003	0.6867	0.1809	4.4700e-003	0.1853		738.9593	738.9593	0.0262		739.6139
<b>Total</b>	<b>0.4172</b>	<b>0.2581</b>	<b>3.1431</b>	<b>7.4300e-003</b>	<b>0.6818</b>	<b>4.8500e-003</b>	<b>0.6867</b>	<b>0.1809</b>	<b>4.4700e-003</b>	<b>0.1853</b>		<b>738.9593</b>	<b>738.9593</b>	<b>0.0262</b>		<b>739.6139</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.3542	152.4743	277.1011	1.2748	93.5508	0.9416	94.4924	25.0587	0.8843	25.9430		129,758.7523	129,758.7523	4.4190		129,869.2270
Unmitigated	21.3542	152.4743	277.1011	1.2748	93.5508	0.9416	94.4924	25.0587	0.8843	25.9430		129,758.7523	129,758.7523	4.4190		129,869.2270

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	2,830,337	2,830,337
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	5,061.61	5,061.61	5,061.61	35,094,539	35,094,539
Total	7,006.07	7,006.07	7,006.07	43,673,421	43,673,421

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	9.50	9.50	25.00	0.00	81.00	19.00	90	10	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
NaturalGas Unmitigated	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	47.7748	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
<b>Total</b>		<b>5.2000e-004</b>	<b>4.6800e-003</b>	<b>3.9300e-003</b>	<b>3.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>5.6206</b>	<b>5.6206</b>	<b>1.1000e-004</b>	<b>1.0000e-004</b>	<b>5.6540</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0.0477748	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
<b>Total</b>		<b>5.2000e-004</b>	<b>4.6800e-003</b>	<b>3.9300e-003</b>	<b>3.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>5.6206</b>	<b>5.6206</b>	<b>1.1000e-004</b>	<b>1.0000e-004</b>	<b>5.6540</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Unmitigated	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0559	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
<b>Total</b>	<b>10.6595</b>	<b>5.5000e-003</b>	<b>0.6070</b>	<b>5.0000e-005</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3900e-003</b>		<b>1.3893</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0559	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
<b>Total</b>	<b>10.6595</b>	<b>5.5000e-003</b>	<b>0.6070</b>	<b>5.0000e-005</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3900e-003</b>		<b>1.3893</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.1953</b>	<b>32.1767</b>	<b>18.3464</b>	<b>0.0346</b>		<b>1.0585</b>	<b>1.0585</b>		<b>1.0585</b>	<b>1.0585</b>		<b>3,680.8497</b>	<b>3,680.8497</b>	<b>0.5161</b>		<b>3,693.7511</b>

Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative B

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 1
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	209.00
tblConstructionPhase	NumDays	1,110.00	272.00
tblConstructionPhase	NumDays	110.00	65.00
tblConstructionPhase	NumDays	75.00	76.00
tblConstructionPhase	NumDays	40.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	12.17
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	0.12
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	162.50	275.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,234.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	10.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PR_TP	66.00	90.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	0.00	33.67

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblWater	IndoorWaterUseRate	4,342,162.79	4,520,822.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,527,735.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,888,860.00
tblWater	IndoorWaterUseRate	0.00	31,791,583.00
tblWater	OutdoorWaterUseRate	277,159.33	205,457.00
tblWater	OutdoorWaterUseRate	704,632.50	751,132.00
tblWater	OutdoorWaterUseRate	1,903,334.59	494,863.00
tblWater	OutdoorWaterUseRate	0.00	1,444,824.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.3177	54.6055	37.9802	0.1070	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,792.88 40	10,792.88 40	1.9491	0.0000	10,823.71 32
2020	36.9352	56.8665	54.5986	0.1390	5.3353	2.1229	7.4582	1.4402	1.9887	3.4290	0.0000	13,860.45 98	13,860.45 98	1.9268	0.0000	13,908.63 02
Maximum	36.9352	56.8665	54.5986	0.1390	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	13,860.45 98	13,860.45 98	1.9491	0.0000	13,908.63 02

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.6304	41.4750	38.6902	0.1070	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	10,792.8840	10,792.8840	1.9491	0.0000	10,823.7132
2020	34.5109	48.8093	58.2684	0.1390	5.3353	0.4446	5.7799	1.4402	0.4374	1.8777	0.0000	13,860.4598	13,860.4598	1.9268	0.0000	13,908.6302
Maximum	34.5109	48.8093	58.2684	0.1390	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	13,860.4598	13,860.4598	1.9491	0.0000	13,908.6302

	ROG	NOx	CO	SO2	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	9.73	19.01	-4.73	0.00	42.19	65.21	49.40	47.87	64.61	58.15	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Energy	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
Mobile	17.1358	160.0255	235.8160	1.1676	93.5508	0.9444	94.4951	25.0587	0.8869	25.9457		119,031.3463	119,031.3463	4.4663		119,143.0044
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>34.9910</b>	<b>192.2124</b>	<b>254.7733</b>	<b>1.2023</b>	<b>93.5508</b>	<b>2.0053</b>	<b>95.5561</b>	<b>25.0587</b>	<b>1.9479</b>	<b>27.0066</b>		<b>122,719.1210</b>	<b>122,719.1210</b>	<b>4.9859</b>	<b>1.0000e-004</b>	<b>122,843.7987</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**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	lb/day										lb/day					
Area	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Energy	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
Mobile	17.1358	160.0255	235.8160	1.1676	93.5508	0.9444	94.4951	25.0587	0.8869	25.9457		119,031.3463	119,031.3463	4.4663		119,143.0044
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>34.9910</b>	<b>192.2124</b>	<b>254.7733</b>	<b>1.2023</b>	<b>93.5508</b>	<b>2.0053</b>	<b>95.5561</b>	<b>25.0587</b>	<b>1.9479</b>	<b>27.0066</b>		<b>122,719.1210</b>	<b>122,719.1210</b>	<b>4.9859</b>	<b>1.0000e-004</b>	<b>122,843.7987</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 275**

**Acres of Paving: 64.96**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 614,660; Non-Residential Outdoor: 204,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	417.00	163.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	83.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					10.5088	0.0000	10.5088	3.7947	0.0000	3.7947			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>10.5088</b>	<b>2.3827</b>	<b>12.8915</b>	<b>3.7947</b>	<b>2.1920</b>	<b>5.9867</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.7290	0.0000	4.7290	1.7076	0.0000	1.7076			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>4.7290</b>	<b>1.1249</b>	<b>5.8539</b>	<b>1.7076</b>	<b>1.0439</b>	<b>2.7515</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9057	22.0129	5.5846	0.0467	1.1047	0.1746	1.2792	0.3181	0.1670	0.4851		4,876.923 2	4,876.923 2	0.4680		4,888.623 0
Worker	2.0508	1.7782	15.2318	0.0334	3.4256	0.0253	3.4508	0.9086	0.0233	0.9319		3,324.380 7	3,324.380 7	0.1338		3,327.726 7
<b>Total</b>	<b>2.9565</b>	<b>23.7912</b>	<b>20.8164</b>	<b>0.0801</b>	<b>4.5302</b>	<b>0.1998</b>	<b>4.7300</b>	<b>1.2267</b>	<b>0.1903</b>	<b>1.4170</b>		<b>8,201.303 9</b>	<b>8,201.303 9</b>	<b>0.6018</b>		<b>8,216.349 7</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1969	0.1969		0.1969	0.1969	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1969</b>	<b>0.1969</b>		<b>0.1969</b>	<b>0.1969</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9057	22.0129	5.5846	0.0467	1.1047	0.1746	1.2792	0.3181	0.1670	0.4851		4,876.923 2	4,876.923 2	0.4680		4,888.623 0
Worker	2.0508	1.7782	15.2318	0.0334	3.4256	0.0253	3.4508	0.9086	0.0233	0.9319		3,324.380 7	3,324.380 7	0.1338		3,327.726 7
<b>Total</b>	<b>2.9565</b>	<b>23.7912</b>	<b>20.8164</b>	<b>0.0801</b>	<b>4.5302</b>	<b>0.1998</b>	<b>4.7300</b>	<b>1.2267</b>	<b>0.1903</b>	<b>1.4170</b>		<b>8,201.303 9</b>	<b>8,201.303 9</b>	<b>0.6018</b>		<b>8,216.349 7</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7352	20.0171	4.8688	0.0463	1.1047	0.1120	1.2167	0.3181	0.1071	0.4252		4,842.429 3	4,842.429 3	0.4285		4,853.140 5
Worker	1.8362	1.5497	13.2774	0.0324	3.4256	0.0244	3.4499	0.9086	0.0225	0.9311		3,219.228 7	3,219.228 7	0.1131		3,222.056 4
<b>Total</b>	<b>2.5714</b>	<b>21.5668</b>	<b>18.1462</b>	<b>0.0787</b>	<b>4.5302</b>	<b>0.1364</b>	<b>4.6666</b>	<b>1.2267</b>	<b>0.1296</b>	<b>1.3563</b>		<b>8,061.657 9</b>	<b>8,061.657 9</b>	<b>0.5416</b>		<b>8,075.196 9</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1969	0.1969		0.1969	0.1969	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1969</b>	<b>0.1969</b>		<b>0.1969</b>	<b>0.1969</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7352	20.0171	4.8688	0.0463	1.1047	0.1120	1.2167	0.3181	0.1071	0.4252		4,842.429 3	4,842.429 3	0.4285		4,853.140 5
Worker	1.8362	1.5497	13.2774	0.0324	3.4256	0.0244	3.4499	0.9086	0.0225	0.9311		3,219.228 7	3,219.228 7	0.1131		3,222.056 4
<b>Total</b>	<b>2.5714</b>	<b>21.5668</b>	<b>18.1462</b>	<b>0.0787</b>	<b>4.5302</b>	<b>0.1364</b>	<b>4.6666</b>	<b>1.2267</b>	<b>0.1296</b>	<b>1.3563</b>		<b>8,061.657 9</b>	<b>8,061.657 9</b>	<b>0.5416</b>		<b>8,075.196 9</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	1.7864					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.1430</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	1.7864					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.3474</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.4273					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>28.6695</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3655	0.3085	2.6428	6.4400e-003	0.6818	4.8500e-003	0.6867	0.1809	4.4700e-003	0.1853		640.7578	640.7578	0.0225		641.3206
<b>Total</b>	<b>0.3655</b>	<b>0.3085</b>	<b>2.6428</b>	<b>6.4400e-003</b>	<b>0.6818</b>	<b>4.8500e-003</b>	<b>0.6867</b>	<b>0.1809</b>	<b>4.4700e-003</b>	<b>0.1853</b>		<b>640.7578</b>	<b>640.7578</b>	<b>0.0225</b>		<b>641.3206</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	28.4273					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>28.4867</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3655	0.3085	2.6428	6.4400e-003	0.6818	4.8500e-003	0.6867	0.1809	4.4700e-003	0.1853		640.7578	640.7578	0.0225		641.3206
<b>Total</b>	<b>0.3655</b>	<b>0.3085</b>	<b>2.6428</b>	<b>6.4400e-003</b>	<b>0.6818</b>	<b>4.8500e-003</b>	<b>0.6867</b>	<b>0.1809</b>	<b>4.4700e-003</b>	<b>0.1853</b>		<b>640.7578</b>	<b>640.7578</b>	<b>0.0225</b>		<b>641.3206</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.1358	160.0255	235.8160	1.1676	93.5508	0.9444	94.4951	25.0587	0.8869	25.9457		119,031.3463	119,031.3463	4.4663		119,143.0044
Unmitigated	17.1358	160.0255	235.8160	1.1676	93.5508	0.9444	94.4951	25.0587	0.8869	25.9457		119,031.3463	119,031.3463	4.4663		119,143.0044

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	2,830,337	2,830,337
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	5,061.61	5,061.61	5,061.61	35,094,539	35,094,539
Total	7,006.07	7,006.07	7,006.07	43,673,421	43,673,421

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	90	10	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	100	0	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
NaturalGas Unmitigated	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	47.7748	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
<b>Total</b>		<b>5.2000e-004</b>	<b>4.6800e-003</b>	<b>3.9300e-003</b>	<b>3.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>5.6206</b>	<b>5.6206</b>	<b>1.1000e-004</b>	<b>1.0000e-004</b>	<b>5.6540</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0.0477748	5.2000e-004	4.6800e-003	3.9300e-003	3.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		5.6206	5.6206	1.1000e-004	1.0000e-004	5.6540
<b>Total</b>		<b>5.2000e-004</b>	<b>4.6800e-003</b>	<b>3.9300e-003</b>	<b>3.0000e-005</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>3.6000e-004</b>	<b>3.6000e-004</b>		<b>5.6206</b>	<b>5.6206</b>	<b>1.1000e-004</b>	<b>1.0000e-004</b>	<b>5.6540</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
Unmitigated	10.6595	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0559	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
<b>Total</b>	<b>10.6595</b>	<b>5.5000e-003</b>	<b>0.6070</b>	<b>5.0000e-005</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3900e-003</b>		<b>1.3893</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0559	5.5000e-003	0.6070	5.0000e-005		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003		1.3045	1.3045	3.3900e-003		1.3893
<b>Total</b>	<b>10.6595</b>	<b>5.5000e-003</b>	<b>0.6070</b>	<b>5.0000e-005</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>2.1600e-003</b>	<b>2.1600e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3900e-003</b>		<b>1.3893</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.1953</b>	<b>32.1767</b>	<b>18.3464</b>	<b>0.0346</b>		<b>1.0585</b>	<b>1.0585</b>		<b>1.0585</b>	<b>1.0585</b>		<b>3,680.8497</b>	<b>3,680.8497</b>	<b>0.5161</b>		<b>3,693.7511</b>

Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## **11.0 Vegetation**

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**Redding Rancheria FTT and Casino Project – Alternative B**  
**Shasta County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.01	0.17	0.00	0.00	0.83	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.32	0.12	-0.03	0.00	0.73	0.72	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.38	0.24	-0.10	0.00	0.53	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.25	0.20	-0.17	0.00	0.88	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**



Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	2	2	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	2	2	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	9	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 1	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.53100E-002	1.75960E-001	1.91380E-001	3.10000E-004	1.15900E-002	1.15900E-002	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67332E+001
Cranes	5.44400E-002	6.47520E-001	2.53440E-001	6.90000E-004	2.67600E-002	2.46200E-002	0.00000E+000	6.04326E+001	6.04326E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	1.69500E-002	1.74320E-001	2.12110E-001	3.40000E-004	8.41000E-003	7.73000E-003	0.00000E+000	3.01396E+001	3.01396E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	5.92800E-002	5.33700E-001	4.82010E-001	6.20000E-004	3.99000E-002	3.67100E-002	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53324E+001
Generator Sets	5.47700E-002	4.76380E-001	5.04150E-001	8.90000E-004	2.70100E-002	2.70100E-002	0.00000E+000	7.68682E+001	7.68682E+001	4.37000E-003	0.00000E+000	7.69775E+001
Graders	1.58200E-002	2.13840E-001	5.97400E-002	2.20000E-004	6.86000E-003	6.31000E-003	0.00000E+000	1.93892E+001	1.93892E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	1.99600E-002	2.13580E-001	2.20270E-001	3.60000E-004	1.03800E-002	9.55000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	1.57700E-002	1.62740E-001	1.92610E-001	3.10000E-004	8.14000E-003	7.49000E-003	0.00000E+000	2.72012E+001	2.72012E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	1.58200E-002	1.58170E-001	1.43900E-001	2.00000E-004	1.00800E-002	9.28000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	1.13460E-001	1.20744E+000	4.28410E-001	8.50000E-004	5.88700E-002	5.41600E-002	0.00000E+000	7.66960E+001	7.66960E+001	2.42700E-002	0.00000E+000	7.73026E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84396E+001	8.84396E+001	2.79800E-002	0.00000E+000	8.91391E+001
Tractors/Loaders/ Backhoes	1.11550E-001	1.12053E+000	1.17143E+000	1.59000E-003	7.23700E-002	6.65800E-002	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	4.70000E-002	2.14280E-001	2.40760E-001	3.50000E-004	1.19600E-002	1.19600E-002	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	6.21000E-003	1.41800E-001	1.91490E-001	3.10000E-004	1.49000E-003	1.49000E-003	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67331E+001
Cranes	1.68700E-002	3.26190E-001	3.65560E-001	6.90000E-004	1.86000E-003	1.86000E-003	0.00000E+000	6.04325E+001	6.04325E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	8.26000E-003	1.59690E-001	2.54670E-001	3.40000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.01395E+001	3.01395E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	1.53700E-002	3.50960E-001	4.73920E-001	6.20000E-004	3.69000E-003	3.69000E-003	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53323E+001
Generator Sets	1.78900E-002	4.08530E-001	5.51660E-001	8.90000E-004	4.29000E-003	4.29000E-003	0.00000E+000	7.68681E+001	7.68681E+001	4.37000E-003	0.00000E+000	7.69774E+001
Graders	5.27000E-003	1.01960E-001	1.14260E-001	2.20000E-004	5.80000E-004	5.80000E-004	0.00000E+000	1.93891E+001	1.93891E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	8.78000E-003	1.69790E-001	2.70790E-001	3.60000E-004	1.23000E-003	1.23000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	7.64000E-003	1.47780E-001	2.35680E-001	3.10000E-004	1.07000E-003	1.07000E-003	0.00000E+000	2.72011E+001	2.72011E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	4.89000E-003	1.11650E-001	1.50770E-001	2.00000E-004	1.17000E-003	1.17000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	2.09100E-002	4.04270E-001	4.53060E-001	8.50000E-004	2.30000E-003	2.30000E-003	0.00000E+000	7.66959E+001	7.66959E+001	2.42700E-002	0.00000E+000	7.73025E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84395E+001	8.84395E+001	2.79800E-002	0.00000E+000	8.91390E+001
Tractors/Loaders/Balckhoes	3.88900E-002	8.88010E-001	1.19914E+000	1.59000E-003	9.33000E-003	9.33000E-003	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	1.44000E-002	2.29890E-001	2.03570E-001	3.50000E-004	1.04300E-002	1.04300E-002	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.54642E-001	1.94135E-001	-5.74773E-004	0.00000E+000	8.71441E-001	8.71441E-001	0.00000E+000	1.12437E-006	1.12437E-006	0.00000E+000	0.00000E+000	1.49627E-006
Cranes	6.90118E-001	4.96247E-001	-4.42393E-001	0.00000E+000	9.30493E-001	9.24452E-001	0.00000E+000	1.15832E-006	1.15832E-006	0.00000E+000	0.00000E+000	1.14904E-006
Excavators	5.12684E-001	8.39261E-002	-2.00651E-001	0.00000E+000	8.62069E-001	8.49935E-001	0.00000E+000	1.32716E-006	1.32716E-006	0.00000E+000	0.00000E+000	9.87559E-007
Forklifts	7.40722E-001	3.42402E-001	1.67839E-002	0.00000E+000	9.07519E-001	8.99482E-001	0.00000E+000	1.09311E-006	1.09311E-006	0.00000E+000	0.00000E+000	1.26508E-006
Generator Sets	6.73361E-001	1.42428E-001	-9.42378E-002	0.00000E+000	8.41170E-001	8.41170E-001	0.00000E+000	1.17084E-006	1.17084E-006	0.00000E+000	0.00000E+000	1.29908E-006
Graders	6.66877E-001	5.23195E-001	-9.12621E-001	0.00000E+000	9.15452E-001	9.08082E-001	0.00000E+000	1.03150E-006	1.03150E-006	0.00000E+000	0.00000E+000	1.53511E-006
Pavers	5.60120E-001	2.05029E-001	-2.29355E-001	0.00000E+000	8.81503E-001	8.71204E-001	0.00000E+000	1.27432E-006	1.27432E-006	0.00000E+000	0.00000E+000	1.26410E-006
Paving Equipment	5.15536E-001	9.19258E-002	-2.23612E-001	0.00000E+000	8.68550E-001	8.57143E-001	0.00000E+000	1.47053E-006	1.47053E-006	0.00000E+000	0.00000E+000	1.09405E-006
Rollers	6.90898E-001	2.94114E-001	-4.77415E-002	0.00000E+000	8.83929E-001	8.73922E-001	0.00000E+000	1.14176E-006	1.14176E-006	0.00000E+000	0.00000E+000	1.13260E-006
Rubber Tired Dozers	8.15706E-001	6.65184E-001	-5.75383E-002	0.00000E+000	9.60931E-001	9.57533E-001	0.00000E+000	1.17346E-006	1.17346E-006	0.00000E+000	0.00000E+000	1.29362E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13072E-006	1.13072E-006	0.00000E+000	0.00000E+000	1.23403E-006
Tractors/Loaders/Backhoes	6.51367E-001	2.07509E-001	-2.36548E-002	0.00000E+000	8.71079E-001	8.59868E-001	0.00000E+000	1.13612E-006	1.13612E-006	0.00000E+000	0.00000E+000	1.19752E-006
Welders	6.93617E-001	-7.28486E-002	1.54469E-001	0.00000E+000	1.27926E-001	1.27926E-001	0.00000E+000	1.17197E-006	1.17197E-006	0.00000E+000	0.00000E+000	1.16761E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.07	0.02	0.07	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.59	0.16	0.59	0.16	0.00	0.00
Grading	Fugitive Dust	0.34	0.12	0.15	0.06	0.55	0.55
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.41	0.22	0.18	0.10	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.10	29.18	29.60	29.58	29.33
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

### Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		



Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative B

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## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	40.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019

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tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2040
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

**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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	8.2700e-003	2.3900e-003	0.0107	4.5100e-003	2.2000e-003	6.7100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	8.2700e-003	2.3900e-003	0.0107	4.5100e-003	2.2000e-003	6.7100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

	ROG	NOx	CO	SO2	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	54.59	0.00	48.25	54.76	0.00	44.86	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.0358	0.0358
		Highest	0.0358	0.0358

## 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	1.9401	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134
Energy	0.0334	0.3037	0.2551	1.8200e-003		0.0231	0.0231		0.0231	0.0231	0.0000	2,079.2367	2,079.2367	0.0854	0.0224	2,088.0531
Mobile	1.0990	17.2009	9.9408	0.0809	5.7081	0.0285	5.7366	1.5339	0.0267	1.5606	0.0000	7,543.7698	7,543.7698	0.5673	0.0000	7,557.9534
Stationary	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
Waste						0.0000	0.0000		0.0000	0.0000	27.8422	0.0000	27.8422	1.6454	0.0000	68.9780
Water						0.0000	0.0000		0.0000	0.0000	12.8497	66.6939	79.5436	1.3228	0.0318	122.0860
<b>Total</b>	<b>3.1157</b>	<b>17.6982</b>	<b>10.3604</b>	<b>0.0829</b>	<b>5.7081</b>	<b>0.0581</b>	<b>5.7662</b>	<b>1.5339</b>	<b>0.0563</b>	<b>1.5902</b>	<b>40.6919</b>	<b>9,709.8422</b>	<b>9,750.5341</b>	<b>3.6241</b>	<b>0.0542</b>	<b>9,857.2894</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**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	1.9401	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134
Energy	0.0334	0.3037	0.2551	1.8200e-003		0.0231	0.0231		0.0231	0.0231	0.0000	2,079.2367	2,079.2367	0.0854	0.0224	2,088.0531
Mobile	1.0990	17.2009	9.9408	0.0809	5.7081	0.0285	5.7366	1.5339	0.0267	1.5606	0.0000	7,543.7698	7,543.7698	0.5673	0.0000	7,557.9534
Stationary	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
Waste						0.0000	0.0000		0.0000	0.0000	27.8422	0.0000	27.8422	1.6454	0.0000	68.9780
Water						0.0000	0.0000		0.0000	0.0000	9.0462	47.4695	56.5157	0.9313	0.0224	86.4676
<b>Total</b>	<b>3.1157</b>	<b>17.6982</b>	<b>10.3604</b>	<b>0.0829</b>	<b>5.7081</b>	<b>0.0581</b>	<b>5.7662</b>	<b>1.5339</b>	<b>0.0563</b>	<b>1.5902</b>	<b>36.8884</b>	<b>9,690.6178</b>	<b>9,727.5062</b>	<b>3.2325</b>	<b>0.0448</b>	<b>9,821.6709</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9.35</b>	<b>0.20</b>	<b>0.24</b>	<b>10.80</b>	<b>17.36</b>	<b>0.36</b>



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-318.9400
<b>Total</b>	<b>-318.9400</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 64.96****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**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					8.1300e-003	0.0000	8.1300e-003	4.4700e-003	0.0000	4.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>8.1300e-003</b>	<b>2.3900e-003</b>	<b>0.0105</b>	<b>4.4700e-003</b>	<b>2.2000e-003</b>	<b>6.6700e-003</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.0990	17.2009	9.9408	0.0809	5.7081	0.0285	5.7366	1.5339	0.0267	1.5606	0.0000	7,543.7698	7,543.7698	0.5673	0.0000	7,557.9534
Unmitigated	1.0990	17.2009	9.9408	0.0809	5.7081	0.0285	5.7366	1.5339	0.0267	1.5606	0.0000	7,543.7698	7,543.7698	0.5673	0.0000	7,557.9534

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	7,958.46	9,547.46	7,700.46	15,383,409	15,383,409

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1,748.5776	1,748.5776	0.0791	0.0164	1,755.4290
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,748.5776	1,748.5776	0.0791	0.0164	1,755.4290
NaturalGas Mitigated	0.0334	0.3037	0.2551	1.8200e-003		0.0231	0.0231		0.0231	0.0231	0.0000	330.6592	330.6592	6.3400e-003	6.0600e-003	332.6241
NaturalGas Unmitigated	0.0334	0.3037	0.2551	1.8200e-003		0.0231	0.0231		0.0231	0.0231	0.0000	330.6592	330.6592	6.3400e-003	6.0600e-003	332.6241

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**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					
Arena	211176	1.1400e-003	0.0104	8.7000e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.2692	11.2692	2.2000e-004	2.1000e-004	11.3361
Enclosed Parking Structure	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
Hotel	4.47674e+006	0.0241	0.2195	0.1843	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8961	238.8961	4.5800e-003	4.3800e-003	240.3157
Movie Theater (No Matinee)	1.5084e+006	8.1300e-003	0.0739	0.0621	4.4000e-004		5.6200e-003	5.6200e-003		5.6200e-003	5.6200e-003	0.0000	80.4940	80.4940	1.5400e-003	1.4800e-003	80.9723
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
User Defined Recreational	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
<b>Total</b>		<b>0.0334</b>	<b>0.3037</b>	<b>0.2552</b>	<b>1.8200e-003</b>		<b>0.0231</b>	<b>0.0231</b>		<b>0.0231</b>	<b>0.0231</b>	<b>0.0000</b>	<b>330.6592</b>	<b>330.6592</b>	<b>6.3400e-003</b>	<b>6.0700e-003</b>	<b>332.6241</b>



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	211176	1.1400e-003	0.0104	8.7000e-003	6.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004	0.0000	11.2692	11.2692	2.2000e-004	2.1000e-004	11.3361
Enclosed Parking Structure	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
Hotel	4.47674e+006	0.0241	0.2195	0.1843	1.3200e-003		0.0167	0.0167		0.0167	0.0167	0.0000	238.8961	238.8961	4.5800e-003	4.3800e-003	240.3157
Movie Theater (No Matinee)	1.5084e+006	8.1300e-003	0.0739	0.0621	4.4000e-004		5.6200e-003	5.6200e-003		5.6200e-003	5.6200e-003	0.0000	80.4940	80.4940	1.5400e-003	1.4800e-003	80.9723
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
User Defined Recreational	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
<b>Total</b>		<b>0.0334</b>	<b>0.3037</b>	<b>0.2552</b>	<b>1.8200e-003</b>		<b>0.0231</b>	<b>0.0231</b>		<b>0.0231</b>	<b>0.0231</b>	<b>0.0000</b>	<b>330.6592</b>	<b>330.6592</b>	<b>6.3400e-003</b>	<b>6.0700e-003</b>	<b>332.6241</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	90619.2	26.3622	1.1900e-003	2.5000e-004	26.4655
Enclosed Parking Structure	3.82193e+006	1,111.8418	0.0503	0.0104	1,116.1983
Hotel	1.45086e+006	422.0724	0.0191	3.9500e-003	423.7262
Movie Theater (No Matinee)	647280	188.3012	8.5100e-003	1.7600e-003	189.0390
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,748.5776</b>	<b>0.0791</b>	<b>0.0164</b>	<b>1,755.4290</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	90619.2	26.3622	1.1900e-003	2.5000e-004	26.4655
Enclosed Parking Structure	3.82193e+006	1,111.8418	0.0503	0.0104	1,116.1983
Hotel	1.45086e+006	422.0724	0.0191	3.9500e-003	423.7262
Movie Theater (No Matinee)	647280	188.3012	8.5100e-003	1.7600e-003	189.0390
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>1,748.5776</b>	<b>0.0791</b>	<b>0.0164</b>	<b>1,755.4290</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.9401	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134
Unmitigated	1.9401	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134

## 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	0.2971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9800e-003	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134
<b>Total</b>	<b>1.9401</b>	<b>4.9000e-004</b>	<b>0.0544</b>	<b>0.0000</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.1065</b>	<b>0.1065</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.1134</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**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	0.2971					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6381					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9800e-003	4.9000e-004	0.0544	0.0000		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.1065	0.1065	2.7000e-004	0.0000	0.1134
<b>Total</b>	<b>1.9401</b>	<b>4.9000e-004</b>	<b>0.0544</b>	<b>0.0000</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>		<b>1.9000e-004</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>0.1065</b>	<b>0.1065</b>	<b>2.7000e-004</b>	<b>0.0000</b>	<b>0.1134</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	56.5157	0.9313	0.0224	86.4676
Unmitigated	79.5436	1.3228	0.0318	122.0860

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.34216 / 0.277159	8.4949	0.1418	3.4100e-003	13.0556
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	6.34169 / 0.704632	12.7120	0.2071	4.9800e-003	19.3740
Movie Theater (No Matinee)	29.8189 / 1.90333	58.3367	0.9739	0.0234	89.6564
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>79.5436</b>	<b>1.3228</b>	<b>0.0318</b>	<b>122.0860</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.05688 / 0.2439	6.0301	0.0998	2.4000e-003	9.2410
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	4.46455 / 0.620077	9.0755	0.1458	3.5100e-003	13.7661
Movie Theater (No Matinee)	20.9925 / 1.67493	41.4101	0.6856	0.0165	63.4605
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>56.5157</b>	<b>0.9313</b>	<b>0.0224</b>	<b>86.4676</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.8422	1.6454	0.0000	68.9780
Unmitigated	27.8422	1.6454	0.0000	68.9780

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.28	0.0568	3.3600e-003	0.0000	0.1408
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	136.88	27.7854	1.6421	0.0000	68.8372
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>27.8422</b>	<b>1.6454</b>	<b>0.0000</b>	<b>68.9780</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0.28	0.0568	3.3600e-003	0.0000	0.1408
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	136.88	27.7854	1.6421	0.0000	68.8372
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>27.8422</b>	<b>1.6454</b>	<b>0.0000</b>	<b>68.9780</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

User Defined Equipment

Equipment Type	Number
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**10.1 Stationary Sources**Unmitigated/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
Equipment Type	tons/yr										MT/yr					
						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0432</b>	<b>0.1931</b>	<b>0.1101</b>	<b>2.1000e-004</b>		<b>6.3500e-003</b>	<b>6.3500e-003</b>		<b>6.3500e-003</b>	<b>6.3500e-003</b>	<b>0.0000</b>	<b>20.0353</b>	<b>20.0353</b>	<b>2.8100e-003</b>	<b>0.0000</b>	<b>20.1055</b>

**11.0 Vegetation**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-318.9400	0.0000	0.0000	-318.9400

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 158	-318.9400	0.0000	0.0000	-318.9400
<b>Total</b>		<b>-318.9400</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-318.9400</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative B

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	40.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2040
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

	ROG	NOx	CO	SO2	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	54.55	0.00	48.22	54.78	0.00	44.88	0.00	0.00	0.00	0.00	0.00	0.00



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Energy	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
Mobile	8.9842	110.8060	70.5444	0.5512	38.5739	0.1830	38.7569	10.3230	0.1715	10.4945		56,621.2590	56,621.2590	3.8472		56,717.4397
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>27.0214</b>	<b>144.6525</b>	<b>90.8935</b>	<b>0.5958</b>	<b>38.5739</b>	<b>1.3701</b>	<b>39.9440</b>	<b>10.3230</b>	<b>1.3586</b>	<b>11.6816</b>		<b>62,300.6151</b>	<b>62,300.6151</b>	<b>4.4049</b>	<b>0.0366</b>	<b>62,421.6496</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**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	lb/day										lb/day					
Area	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Energy	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
Mobile	8.9842	110.8060	70.5444	0.5512	38.5739	0.1830	38.7569	10.3230	0.1715	10.4945		56,621.2590	56,621.2590	3.8472		56,717.4397
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>27.0214</b>	<b>144.6525</b>	<b>90.8935</b>	<b>0.5958</b>	<b>38.5739</b>	<b>1.3701</b>	<b>39.9440</b>	<b>10.3230</b>	<b>1.3586</b>	<b>11.6816</b>		<b>62,300.6151</b>	<b>62,300.6151</b>	<b>4.4049</b>	<b>0.0366</b>	<b>62,421.6496</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0**

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**Acres of Paving: 64.96****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.3904</b>	<b>10.5202</b>	<b>4.4688</b>	<b>2.1991</b>	<b>6.6679</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.9842	110.8060	70.5444	0.5512	38.5739	0.1830	38.7569	10.3230	0.1715	10.4945		56,621.25 90	56,621.25 90	3.8472		56,717.43 97
Unmitigated	8.9842	110.8060	70.5444	0.5512	38.5739	0.1830	38.7569	10.3230	0.1715	10.4945		56,621.25 90	56,621.25 90	3.8472		56,717.43 97

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	7,958.46	9,547.46	7,700.46	15,383,409	15,383,409

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
NaturalGas Unmitigated	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**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	lb/day										lb/day					
Arena	578.564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	4132.6	0.0446	0.4052	0.3403	2.4300e-003		0.0308	0.0308		0.0308	0.0308		486.1886	486.1886	9.3200e-003	8.9100e-003	489.0777
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
User Defined Recreational	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
<b>Total</b>		<b>0.1831</b>	<b>1.6643</b>	<b>1.3980</b>	<b>9.9800e-003</b>		<b>0.1265</b>	<b>0.1265</b>		<b>0.1265</b>	<b>0.1265</b>		<b>1,997.2020</b>	<b>1,997.2020</b>	<b>0.0383</b>	<b>0.0366</b>	<b>2,009.0703</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	0.578564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12.265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	4.1326	0.0446	0.4052	0.3403	2.4300e-003		0.0308	0.0308		0.0308	0.0308		486.1886	486.1886	9.3200e-003	8.9100e-003	489.0777
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
User Defined Recreational	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
<b>Total</b>		<b>0.1831</b>	<b>1.6643</b>	<b>1.3980</b>	<b>9.9800e-003</b>		<b>0.1265</b>	<b>0.1265</b>		<b>0.1265</b>	<b>0.1265</b>		<b>1,997.2020</b>	<b>1,997.2020</b>	<b>0.0383</b>	<b>0.0366</b>	<b>2,009.0703</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Unmitigated	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0553	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
<b>Total</b>	<b>10.6589</b>	<b>5.4300e-003</b>	<b>0.6047</b>	<b>5.0000e-005</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3600e-003</b>		<b>1.3885</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0553	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
<b>Total</b>	<b>10.6589</b>	<b>5.4300e-003</b>	<b>0.6047</b>	<b>5.0000e-005</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3600e-003</b>		<b>1.3885</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.1953</b>	<b>32.1767</b>	<b>18.3464</b>	<b>0.0346</b>		<b>1.0585</b>	<b>1.0585</b>		<b>1.0585</b>	<b>1.0585</b>		<b>3,680.8497</b>	<b>3,680.8497</b>	<b>0.5161</b>		<b>3,693.7511</b>

Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative B

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	13.14	583,500.00	0
Parking Lot	600.00	Space	51.82	0.00	0
Arena	10.08	1000sqft	0.23	10,080.00	0
Hotel	250.00	Room	3.99	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.62	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	3.39	150,326.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

Project Characteristics - Refer to CalEEMod input table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to Appendix Q CalEEMod Tables.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	40.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	13.14
tblLandUse	LotAcreage	5.40	51.82
tblLandUse	LotAcreage	3.24	0.23
tblLandUse	LotAcreage	8.33	3.99
tblLandUse	LotAcreage	1.70	1.62
tblLandUse	LotAcreage	0.00	3.39
tblProjectCharacteristics	OperationalYear	2018	2040
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	4.4235	45.6495	22.7205	0.0394	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.55	0.00	48.22	54.78	0.00	44.88	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Energy	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
Mobile	6.7338	110.0284	66.7929	0.5045	38.5739	0.1846	38.7585	10.3230	0.1730	10.4960		51,870.5458	51,870.5458	4.3147		51,978.4144
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>24.7711</b>	<b>143.8749</b>	<b>87.1420</b>	<b>0.5491</b>	<b>38.5739</b>	<b>1.3717</b>	<b>39.9456</b>	<b>10.3230</b>	<b>1.3601</b>	<b>11.6831</b>		<b>57,549.9019</b>	<b>57,549.9019</b>	<b>4.8724</b>	<b>0.0366</b>	<b>57,682.6243</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**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	lb/day										lb/day					
Area	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Energy	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
Mobile	6.7338	110.0284	66.7929	0.5045	38.5739	0.1846	38.7585	10.3230	0.1730	10.4960		51,870.5458	51,870.5458	4.3147		51,978.4144
Stationary	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>24.7711</b>	<b>143.8749</b>	<b>87.1420</b>	<b>0.5491</b>	<b>38.5739</b>	<b>1.3717</b>	<b>39.9456</b>	<b>10.3230</b>	<b>1.3601</b>	<b>11.6831</b>		<b>57,549.9019</b>	<b>57,549.9019</b>	<b>4.8724</b>	<b>0.0366</b>	<b>57,682.6243</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**Acres of Paving: 64.96****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.3904</b>	<b>10.5202</b>	<b>4.4688</b>	<b>2.1991</b>	<b>6.6679</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7338	110.0284	66.7929	0.5045	38.5739	0.1846	38.7585	10.3230	0.1730	10.4960		51,870.54 58	51,870.54 58	4.3147		51,978.41 44
Unmitigated	6.7338	110.0284	66.7929	0.5045	38.5739	0.1846	38.7585	10.3230	0.1730	10.4960		51,870.54 58	51,870.54 58	4.3147		51,978.41 44

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	107.96	107.96	107.96	209,646	209,646
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	2,042.50	2,047.50	1487.50	3,731,328	3,731,328
Movie Theater (No Matinee)	5,808.00	7,392.00	6105.00	11,442,435	11,442,435
Parking Lot	0.00	0.00	0.00		
User Defined Recreational	0.00	0.00	0.00		
Total	7,958.46	9,547.46	7,700.46	15,383,409	15,383,409

## 4.3 Trip Type Information



## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

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
Arena	9.50	7.30	7.30	0.00	81.00	19.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703
NaturalGas Unmitigated	0.1831	1.6643	1.3980	9.9900e-003		0.1265	0.1265		0.1265	0.1265		1,997.2020	1,997.2020	0.0383	0.0366	2,009.0703

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**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	lb/day										lb/day					
Arena	578.564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	4132.6	0.0446	0.4052	0.3403	2.4300e-003		0.0308	0.0308		0.0308	0.0308		486.1886	486.1886	9.3200e-003	8.9100e-003	489.0777
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
User Defined Recreational	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
<b>Total</b>		<b>0.1831</b>	<b>1.6643</b>	<b>1.3980</b>	<b>9.9800e-003</b>		<b>0.1265</b>	<b>0.1265</b>		<b>0.1265</b>	<b>0.1265</b>		<b>1,997.2020</b>	<b>1,997.2020</b>	<b>0.0383</b>	<b>0.0366</b>	<b>2,009.0703</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	0.578564	6.2400e-003	0.0567	0.0477	3.4000e-004		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003		68.0664	68.0664	1.3000e-003	1.2500e-003	68.4709
Enclosed Parking Structure	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
Hotel	12.265	0.1323	1.2025	1.0101	7.2100e-003		0.0914	0.0914		0.0914	0.0914		1,442.9470	1,442.9470	0.0277	0.0265	1,451.5217
Movie Theater (No Matinee)	4.1326	0.0446	0.4052	0.3403	2.4300e-003		0.0308	0.0308		0.0308	0.0308		486.1886	486.1886	9.3200e-003	8.9100e-003	489.0777
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
User Defined Recreational	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
<b>Total</b>		<b>0.1831</b>	<b>1.6643</b>	<b>1.3980</b>	<b>9.9800e-003</b>		<b>0.1265</b>	<b>0.1265</b>		<b>0.1265</b>	<b>0.1265</b>		<b>1,997.2020</b>	<b>1,997.2020</b>	<b>0.0383</b>	<b>0.0366</b>	<b>2,009.0703</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
Unmitigated	10.6589	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0553	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
<b>Total</b>	<b>10.6589</b>	<b>5.4300e-003</b>	<b>0.6047</b>	<b>5.0000e-005</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3600e-003</b>		<b>1.3885</b>

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6278					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.9758					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0553	5.4300e-003	0.6047	5.0000e-005		2.1500e-003	2.1500e-003		2.1500e-003	2.1500e-003		1.3045	1.3045	3.3600e-003		1.3885
<b>Total</b>	<b>10.6589</b>	<b>5.4300e-003</b>	<b>0.6047</b>	<b>5.0000e-005</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>2.1500e-003</b>	<b>2.1500e-003</b>		<b>1.3045</b>	<b>1.3045</b>	<b>3.3600e-003</b>		<b>1.3885</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
						0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.1953</b>	<b>32.1767</b>	<b>18.3464</b>	<b>0.0346</b>		<b>1.0585</b>	<b>1.0585</b>		<b>1.0585</b>	<b>1.0585</b>		<b>3,680.8497</b>	<b>3,680.8497</b>	<b>0.5161</b>		<b>3,693.7511</b>

Redding Rancheria FTT and Casino Project – Alternative B - Shasta County, Winter

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative B

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12482E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12481E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.89031E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.02	0.01	0.01	0.00	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	28.82	28.95	29.60	29.57	29.17
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
--	--

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

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## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Trips and VMT - Not consistent with other Alternatives.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	264,772.00	200,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	794,315.00	600,000.00
tblArchitecturalCoating	ConstArea_Parking	35,010.00	28,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

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tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019

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tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50

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tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblTripsAndVMT	VendorTripNumber	182.00	162.00
tblTripsAndVMT	WorkerTripNumber	454.00	392.00
tblTripsAndVMT	WorkerTripNumber	91.00	73.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00

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tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00

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tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00
tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**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					
2019	0.3121	3.2899	2.0204	4.1300e-003	0.8612	0.1476	1.0088	0.3677	0.1362	0.5039	0.0000	373.1885	373.1885	0.0938	0.0000	375.5342
2020	3.6236	5.7849	5.2203	0.0150	0.5787	0.1969	0.7756	0.1572	0.1854	0.3426	0.0000	1,362.761 1	1,362.761 1	0.1568	0.0000	1,366.680 1
Maximum	3.6236	5.7849	5.2203	0.0150	0.8612	0.1969	1.0088	0.3677	0.1854	0.5039	0.0000	1,362.761 1	1,362.761 1	0.1568	0.0000	1,366.680 1

**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					
2019	0.1574	2.1914	2.1560	4.1300e-003	0.4170	0.0435	0.4604	0.1735	0.0407	0.2142	0.0000	373.1882	373.1882	0.0938	0.0000	375.5339
2020	3.3935	5.0254	5.4490	0.0150	0.5787	0.0390	0.6177	0.1572	0.0381	0.1953	0.0000	1,362.760 6	1,362.760 6	0.1568	0.0000	1,366.679 6
Maximum	3.3935	5.0254	5.4490	0.0150	0.5787	0.0435	0.6177	0.1735	0.0407	0.2142	0.0000	1,362.760 6	1,362.760 6	0.1568	0.0000	1,366.679 6

	ROG	NOx	CO	SO2	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	9.78	20.47	-5.03	0.00	30.85	76.07	39.58	37.01	75.48	51.63	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.7456	0.9230
2	10-1-2019	12-31-2019	1.8466	1.4261
3	1-1-2020	3-31-2020	1.6487	1.4374
4	4-1-2020	6-30-2020	2.8135	2.5111
5	7-1-2020	9-30-2020	2.7461	2.4602
		Highest	2.8135	2.5111

## 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	2.4913	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155
Energy	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	513.1487	513.1487	0.0232	4.8100e-003	515.1612
Mobile	3.1163	27.6029	39.1019	0.1959	14.3604	0.1533	14.5138	3.8627	0.1440	4.0067	0.0000	18,124.6740	18,124.6740	0.7040	0.0000	18,142.2747
Stationary	0.0543	0.2427	0.3090	1.4300e-003		0.0218	0.0218		0.0218	0.0218	0.0000	240.9652	240.9652	7.0400e-003	0.0000	241.1413
Waste						0.0000	0.0000		0.0000	0.0000	238.7174	0.0000	238.7174	14.1078	0.0000	591.4122
Water						0.0000	0.0000		0.0000	0.0000	23.1943	119.0026	142.1969	2.3877	0.0574	218.9827
<b>Total</b>	<b>5.6620</b>	<b>27.8469</b>	<b>39.4671</b>	<b>0.1974</b>	<b>14.3604</b>	<b>0.1754</b>	<b>14.5358</b>	<b>3.8627</b>	<b>0.1660</b>	<b>4.0287</b>	<b>261.9116</b>	<b>18,997.8989</b>	<b>19,259.8105</b>	<b>17.2300</b>	<b>0.0622</b>	<b>19,709.0876</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4913	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155
Energy	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	513.1487	513.1487	0.0232	4.8100e-003	515.1612
Mobile	3.1163	27.6029	39.1019	0.1959	14.3604	0.1533	14.5138	3.8627	0.1440	4.0067	0.0000	18,124.6740	18,124.6740	0.7040	0.0000	18,142.2747
Stationary	0.0543	0.2427	0.3090	1.4300e-003		0.0218	0.0218		0.0218	0.0218	0.0000	240.9652	240.9652	7.0400e-003	0.0000	241.1413
Waste						0.0000	0.0000		0.0000	0.0000	238.7174	0.0000	238.7174	14.1078	0.0000	591.4122
Water						0.0000	0.0000		0.0000	0.0000	16.3288	84.4676	100.7964	1.6809	0.0404	154.8563
<b>Total</b>	<b>5.6620</b>	<b>27.8469</b>	<b>39.4671</b>	<b>0.1974</b>	<b>14.3604</b>	<b>0.1754</b>	<b>14.5358</b>	<b>3.8627</b>	<b>0.1660</b>	<b>4.0287</b>	<b>255.0461</b>	<b>18,963.3639</b>	<b>19,218.4101</b>	<b>16.5233</b>	<b>0.0452</b>	<b>19,644.9612</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.62</b>	<b>0.18</b>	<b>0.21</b>	<b>4.10</b>	<b>27.30</b>	<b>0.33</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-387.9000
<b>Total</b>	<b>-387.9000</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 387.5****Acres of Paving: 75.29**

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**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600,000; Non-Residential Outdoor: 200,000; Striped Parking Area: 28,000 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	392.00	162.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0975	1.0254	0.4964	8.5000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0975</b>	<b>1.0254</b>	<b>0.4964</b>	<b>8.5000e-004</b>	<b>0.4065</b>	<b>0.0538</b>	<b>0.4603</b>	<b>0.2234</b>	<b>0.0495</b>	<b>0.2729</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**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					0.1829	0.0000	0.1829	0.1006	0.0000	0.1006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.4290	0.5166	8.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0210</b>	<b>0.4290</b>	<b>0.5166</b>	<b>8.5000e-004</b>	<b>0.1829</b>	<b>3.1900e-003</b>	<b>0.1861</b>	<b>0.1006</b>	<b>3.1900e-003</b>	<b>0.1037</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**3.2 Site Preparation - 2019****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	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4012	0.0000	0.4012	0.1298	0.0000	0.1298	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e-003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
<b>Total</b>	<b>0.1540</b>	<b>1.7719</b>	<b>1.0847</b>	<b>2.0200e-003</b>	<b>0.4012</b>	<b>0.0774</b>	<b>0.4786</b>	<b>0.1298</b>	<b>0.0712</b>	<b>0.2010</b>	<b>0.0000</b>	<b>181.0293</b>	<b>181.0293</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4612</b>



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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**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					0.1805	0.0000	0.1805	0.0584	0.0000	0.0584	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0945	1.3452	1.1924	2.0200e-003		0.0366	0.0366		0.0339	0.0339	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
<b>Total</b>	<b>0.0945</b>	<b>1.3452</b>	<b>1.1924</b>	<b>2.0200e-003</b>	<b>0.1805</b>	<b>0.0366</b>	<b>0.2171</b>	<b>0.0584</b>	<b>0.0339</b>	<b>0.0923</b>	<b>0.0000</b>	<b>181.0291</b>	<b>181.0291</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4610</b>

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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2319	0.1888	3.0000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	25.8615	25.8615	6.3000e-003	0.0000	26.0190
<b>Total</b>	<b>0.0260</b>	<b>0.2319</b>	<b>0.1888</b>	<b>3.0000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0133</b>	<b>0.0133</b>	<b>0.0000</b>	<b>25.8615</b>	<b>25.8615</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0190</b>

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**3.4 Building Construction - 2019****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	9.6000e-003	0.2402	0.0559	5.2000e-004	0.0116	1.8900e-003	0.0135	3.3600e-003	1.8100e-003	5.1600e-003	0.0000	49.3129	49.3129	4.3500e-003	0.0000	49.4216
Worker	0.0200	0.0165	0.1562	3.6000e-004	0.0337	2.6000e-004	0.0340	8.9700e-003	2.4000e-004	9.2100e-003	0.0000	32.2218	32.2218	1.2700e-003	0.0000	32.2535
<b>Total</b>	<b>0.0296</b>	<b>0.2567</b>	<b>0.2122</b>	<b>8.8000e-004</b>	<b>0.0453</b>	<b>2.1500e-003</b>	<b>0.0474</b>	<b>0.0123</b>	<b>2.0500e-003</b>	<b>0.0144</b>	<b>0.0000</b>	<b>81.5347</b>	<b>81.5347</b>	<b>5.6200e-003</b>	<b>0.0000</b>	<b>81.6751</b>

**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	7.4100e-003	0.1565	0.1966	3.0000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	25.8614	25.8614	6.3000e-003	0.0000	26.0189
<b>Total</b>	<b>7.4100e-003</b>	<b>0.1565</b>	<b>0.1966</b>	<b>3.0000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>25.8614</b>	<b>25.8614</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0189</b>

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**3.4 Building Construction - 2019****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	9.6000e-003	0.2402	0.0559	5.2000e-004	0.0116	1.8900e-003	0.0135	3.3600e-003	1.8100e-003	5.1600e-003	0.0000	49.3129	49.3129	4.3500e-003	0.0000	49.4216
Worker	0.0200	0.0165	0.1562	3.6000e-004	0.0337	2.6000e-004	0.0340	8.9700e-003	2.4000e-004	9.2100e-003	0.0000	32.2218	32.2218	1.2700e-003	0.0000	32.2535
<b>Total</b>	<b>0.0296</b>	<b>0.2567</b>	<b>0.2122</b>	<b>8.8000e-004</b>	<b>0.0453</b>	<b>2.1500e-003</b>	<b>0.0474</b>	<b>0.0123</b>	<b>2.0500e-003</b>	<b>0.0144</b>	<b>0.0000</b>	<b>81.5347</b>	<b>81.5347</b>	<b>5.6200e-003</b>	<b>0.0000</b>	<b>81.6751</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2650	2.3983	2.1061	3.3600e-003		0.1396	0.1396		0.1313	0.1313	0.0000	289.5125	289.5125	0.0706	0.0000	291.2783
<b>Total</b>	<b>0.2650</b>	<b>2.3983</b>	<b>2.1061</b>	<b>3.3600e-003</b>		<b>0.1396</b>	<b>0.1396</b>		<b>0.1313</b>	<b>0.1313</b>	<b>0.0000</b>	<b>289.5125</b>	<b>289.5125</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2783</b>

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**3.4 Building Construction - 2020****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	0.0883	2.4853	0.5520	5.8700e-003	0.1318	0.0137	0.1455	0.0382	0.0131	0.0513	0.0000	556.5457	556.5457	0.0451	0.0000	557.6738
Worker	0.2039	0.1635	1.5540	3.9300e-003	0.3829	2.8600e-003	0.3857	0.1020	2.6400e-003	0.1046	0.0000	354.5862	354.5862	0.0123	0.0000	354.8929
<b>Total</b>	<b>0.2921</b>	<b>2.6488</b>	<b>2.1060</b>	<b>9.8000e-003</b>	<b>0.5146</b>	<b>0.0166</b>	<b>0.5312</b>	<b>0.1401</b>	<b>0.0158</b>	<b>0.1559</b>	<b>0.0000</b>	<b>911.1318</b>	<b>911.1318</b>	<b>0.0574</b>	<b>0.0000</b>	<b>912.5667</b>

**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	0.0842	1.7783	2.2342	3.3600e-003		0.0169	0.0169		0.0169	0.0169	0.0000	289.5121	289.5121	0.0706	0.0000	291.2779
<b>Total</b>	<b>0.0842</b>	<b>1.7783</b>	<b>2.2342</b>	<b>3.3600e-003</b>		<b>0.0169</b>	<b>0.0169</b>		<b>0.0169</b>	<b>0.0169</b>	<b>0.0000</b>	<b>289.5121</b>	<b>289.5121</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2779</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0883	2.4853	0.5520	5.8700e-003	0.1318	0.0137	0.1455	0.0382	0.0131	0.0513	0.0000	556.5457	556.5457	0.0451	0.0000	557.6738
Worker	0.2039	0.1635	1.5540	3.9300e-003	0.3829	2.8600e-003	0.3857	0.1020	2.6400e-003	0.1046	0.0000	354.5862	354.5862	0.0123	0.0000	354.8929
<b>Total</b>	<b>0.2921</b>	<b>2.6488</b>	<b>2.1060</b>	<b>9.8000e-003</b>	<b>0.5146</b>	<b>0.0166</b>	<b>0.5312</b>	<b>0.1401</b>	<b>0.0158</b>	<b>0.1559</b>	<b>0.0000</b>	<b>911.1318</b>	<b>911.1318</b>	<b>0.0574</b>	<b>0.0000</b>	<b>912.5667</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.5345	0.5568	8.7000e-004		0.0286	0.0286		0.0263	0.0263	0.0000	76.1072	76.1072	0.0246	0.0000	76.7226
Paving	0.0772					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1288</b>	<b>0.5345</b>	<b>0.5568</b>	<b>8.7000e-004</b>		<b>0.0286</b>	<b>0.0286</b>		<b>0.0263</b>	<b>0.0263</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7226</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**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	0.0213	0.4292	0.6572	8.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	76.1072	76.1072	0.0246	0.0000	76.7225
Paving	0.0772					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0985</b>	<b>0.4292</b>	<b>0.6572</b>	<b>8.7000e-004</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7225</b>

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**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.8783					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0253	0.1760	0.1914	3.1000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7332
<b>Total</b>	<b>2.9036</b>	<b>0.1760</b>	<b>0.1914</b>	<b>3.1000e-004</b>		<b>0.0116</b>	<b>0.0116</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7332</b>



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**3.6 Architectural Coating - 2020****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	0.0317	0.0255	0.2419	6.1000e-004	0.0596	4.5000e-004	0.0601	0.0159	4.1000e-004	0.0163	0.0000	55.2033	55.2033	1.9100e-003	0.0000	55.2510
<b>Total</b>	<b>0.0317</b>	<b>0.0255</b>	<b>0.2419</b>	<b>6.1000e-004</b>	<b>0.0596</b>	<b>4.5000e-004</b>	<b>0.0601</b>	<b>0.0159</b>	<b>4.1000e-004</b>	<b>0.0163</b>	<b>0.0000</b>	<b>55.2033</b>	<b>55.2033</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>55.2510</b>

**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	2.8783					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2100e-003	0.1418	0.1915	3.1000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7331
<b>Total</b>	<b>2.8845</b>	<b>0.1418</b>	<b>0.1915</b>	<b>3.1000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7331</b>

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**3.6 Architectural Coating - 2020****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	0.0317	0.0255	0.2419	6.1000e-004	0.0596	4.5000e-004	0.0601	0.0159	4.1000e-004	0.0163	0.0000	55.2033	55.2033	1.9100e-003	0.0000	55.2510
<b>Total</b>	<b>0.0317</b>	<b>0.0255</b>	<b>0.2419</b>	<b>6.1000e-004</b>	<b>0.0596</b>	<b>4.5000e-004</b>	<b>0.0601</b>	<b>0.0159</b>	<b>4.1000e-004</b>	<b>0.0163</b>	<b>0.0000</b>	<b>55.2033</b>	<b>55.2033</b>	<b>1.9100e-003</b>	<b>0.0000</b>	<b>55.2510</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	3.1163	27.6029	39.1019	0.1959	14.3604	0.1533	14.5138	3.8627	0.1440	4.0067	0.0000	18,124.67 40	18,124.67 40	0.7040	0.0000	18,142.27 47
Unmitigated	3.1163	27.6029	39.1019	0.1959	14.3604	0.1533	14.5138	3.8627	0.1440	4.0067	0.0000	18,124.67 40	18,124.67 40	0.7040	0.0000	18,142.27 47

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	512.2531	512.2531	0.0232	4.7900e-003	514.2603
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	512.2531	512.2531	0.0232	4.7900e-003	514.2603
NaturalGas Mitigated	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
NaturalGas Unmitigated	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009

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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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	16782.4	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
<b>Total</b>		<b>9.0000e-005</b>	<b>8.2000e-004</b>	<b>6.9000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.8956</b>	<b>0.8956</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9009</b>

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**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	16782.4	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
<b>Total</b>		<b>9.0000e-005</b>	<b>8.2000e-004</b>	<b>6.9000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.8956</b>	<b>0.8956</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9009</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.76086e+006	512.2531	0.0232	4.7900e-003	514.2603
<b>Total</b>		<b>512.2531</b>	<b>0.0232</b>	<b>4.7900e-003</b>	<b>514.2603</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.76086e+006	512.2531	0.0232	4.7900e-003	514.2603
<b>Total</b>		<b>512.2531</b>	<b>0.0232</b>	<b>4.7900e-003</b>	<b>514.2603</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	2.4913	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155
Unmitigated	2.4913	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155

## 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	0.3803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1200e-003	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155
<b>Total</b>	<b>2.4913</b>	<b>5.0000e-004</b>	<b>0.0556</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1085</b>	<b>0.1085</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1155</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**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	0.3803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1200e-003	5.0000e-004	0.0556	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1155
<b>Total</b>	<b>2.4913</b>	<b>5.0000e-004</b>	<b>0.0556</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1085</b>	<b>0.1085</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1155</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	100.7964	1.6809	0.0404	154.8563
Unmitigated	142.1969	2.3877	0.0574	218.9827

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	1.39166 / 0.073272	2.7068	0.0455	1.0900e-003	4.1684
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	26.0064 / 1.36926	50.5820	0.8493	0.0204	77.8961
Movie Theater (No Matinee)	9.94043 / 0.523374	19.3340	0.3246	7.8000e-003	29.7743
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.948 / 0.94498	34.9086	0.5862	0.0141	53.7591
User Defined Recreational	17.823 / 0.938402	34.6656	0.5821	0.0140	53.3848
<b>Total</b>		<b>142.1969</b>	<b>2.3877</b>	<b>0.0574</b>	<b>218.9827</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.979729 / 0.0644794	1.9187	0.0320	7.7000e-004	2.9477
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	18.3085 / 1.20495	35.8551	0.5979	0.0144	55.0852
Movie Theater (No Matinee)	6.99806 / 0.460569	13.7049	0.2286	5.4900e-003	21.0552
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.6354 / 0.831582	24.7450	0.4127	9.9200e-003	38.0164
User Defined Recreational	12.5474 / 0.825794	24.5727	0.4098	9.8500e-003	37.7518
<b>Total</b>		<b>100.7964</b>	<b>1.6809</b>	<b>0.0404</b>	<b>154.8563</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	238.7174	14.1078	0.0000	591.4122
Unmitigated	238.7174	14.1078	0.0000	591.4122

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1176	238.7174	14.1078	0.0000	591.4122
<b>Total</b>		<b>238.7174</b>	<b>14.1078</b>	<b>0.0000</b>	<b>591.4122</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1176	238.7174	14.1078	0.0000	591.4122
<b>Total</b>		<b>238.7174</b>	<b>14.1078</b>	<b>0.0000</b>	<b>591.4122</b>

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0112	0.0497	0.1989	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	220.9299	220.9299	4.2300e-003	0.0000	221.0358
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0543</b>	<b>0.2427</b>	<b>0.3090</b>	<b>1.4300e-003</b>		<b>0.0218</b>	<b>0.0218</b>		<b>0.0218</b>	<b>0.0218</b>	<b>0.0000</b>	<b>240.9652</b>	<b>240.9652</b>	<b>7.0400e-003</b>	<b>0.0000</b>	<b>241.1413</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-387.9000	0.0000	0.0000	-387.9000

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 142	-387.9000	0.0000	0.0000	-387.9000
<b>Total</b>		<b>-387.9000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-387.9000</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Trips and VMT - Not consistent with other Alternatives.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	264,772.00	200,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	794,315.00	600,000.00
tblArchitecturalCoating	ConstArea_Parking	35,010.00	28,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblTripsAndVMT	VendorTripNumber	182.00	162.00
tblTripsAndVMT	WorkerTripNumber	454.00	392.00
tblTripsAndVMT	WorkerTripNumber	91.00	73.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00
tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.4273	54.5914	38.7739	0.1111	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	11,205.3592	11,205.3592	1.9500	0.0000	11,235.1145
2020	36.4028	55.9606	55.5890	0.1433	5.0410	2.1176	7.1586	1.3620	1.9838	3.3458	0.0000	14,292.6001	14,292.6001	1.8874	0.0000	14,339.7845
Maximum	36.4028	55.9606	55.5890	0.1433	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	14,292.6001	14,292.6001	1.9500	0.0000	14,339.7845

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.7400	41.4610	39.4839	0.1111	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	11,205.3592	11,205.3592	1.9500	0.0000	11,235.1145
2020	33.9785	47.9034	59.2588	0.1433	5.0410	0.3780	5.4190	1.3620	0.3711	1.7331	0.0000	14,292.6001	14,292.6001	1.8874	0.0000	14,339.7845
Maximum	33.9785	47.9034	59.2588	0.1433	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	14,292.6001	14,292.6001	1.9500	0.0000	14,339.7845

	ROG	NOx	CO	SO2	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	9.83	19.17	-4.64	0.00	42.73	66.64	50.15	48.20	66.15	58.85	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	21.0128	147.8145	250.3203	1.1494	82.8485	0.8423	83.6907	22.1920	0.7909	22.9829		117,038.5418	117,038.5418	4.3169		117,146.4636
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>42.0825</b>	<b>180.8654</b>	<b>272.7474</b>	<b>1.2053</b>	<b>82.8485</b>	<b>2.1715</b>	<b>85.0200</b>	<b>22.1920</b>	<b>2.1202</b>	<b>24.3121</b>		<b>124,961.4955</b>	<b>124,961.4955</b>	<b>4.9177</b>	<b>1.0000e-004</b>	<b>125,084.4666</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**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	lb/day										lb/day					
Area	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	21.0128	147.8145	250.3203	1.1494	82.8485	0.8423	83.6907	22.1920	0.7909	22.9829		117,038.5418	117,038.5418	4.3169		117,146.4636
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>42.0825</b>	<b>180.8654</b>	<b>272.7474</b>	<b>1.2053</b>	<b>82.8485</b>	<b>2.1715</b>	<b>85.0200</b>	<b>22.1920</b>	<b>2.1202</b>	<b>24.3121</b>		<b>124,961.4955</b>	<b>124,961.4955</b>	<b>4.9177</b>	<b>1.0000e-004</b>	<b>125,084.4666</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 75.29**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600,000; Non-Residential Outdoor: 200,000; Striped Parking Area: 28,000 (Architectural Coating – sqft)**

**OffRoad Equipment**



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	392.00	162.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.3443	0.0000	12.3443	3.9929	0.0000	3.9929			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>12.3443</b>	<b>2.3827</b>	<b>14.7270</b>	<b>3.9929</b>	<b>2.1920</b>	<b>6.1849</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5549	0.0000	5.5549	1.7968	0.0000	1.7968			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>5.5549</b>	<b>1.1249</b>	<b>6.6798</b>	<b>1.7968</b>	<b>1.0439</b>	<b>2.8407</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8625	21.4079	4.7236	0.0479	1.0979	0.1702	1.2680	0.3161	0.1628	0.4789		5,010.2350	5,010.2350	0.4138		5,020.5804
Worker	2.2036	1.3965	16.8865	0.0363	3.2202	0.0238	3.2439	0.8541	0.0219	0.8761		3,603.5441	3,603.5441	0.1451		3,607.1706
<b>Total</b>	<b>3.0661</b>	<b>22.8044</b>	<b>21.6101</b>	<b>0.0842</b>	<b>4.3181</b>	<b>0.1939</b>	<b>4.5120</b>	<b>1.1703</b>	<b>0.1847</b>	<b>1.3550</b>		<b>8,613.7791</b>	<b>8,613.7791</b>	<b>0.5589</b>		<b>8,627.7510</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8625	21.4079	4.7236	0.0479	1.0979	0.1702	1.2680	0.3161	0.1628	0.4789		5,010.2350	5,010.2350	0.4138		5,020.5804
Worker	2.2036	1.3965	16.8865	0.0363	3.2202	0.0238	3.2439	0.8541	0.0219	0.8761		3,603.5441	3,603.5441	0.1451		3,607.1706
<b>Total</b>	<b>3.0661</b>	<b>22.8044</b>	<b>21.6101</b>	<b>0.0842</b>	<b>4.3181</b>	<b>0.1939</b>	<b>4.5120</b>	<b>1.1703</b>	<b>0.1847</b>	<b>1.3550</b>		<b>8,613.7791</b>	<b>8,613.7791</b>	<b>0.5589</b>		<b>8,627.7510</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6962	19.5323	4.0801	0.0476	1.0979	0.1088	1.2067	0.3161	0.1041	0.4202		4,976.8558	4,976.8558	0.3773		4,986.2881
Worker	1.9704	1.2191	14.8445	0.0351	3.2202	0.0229	3.2431	0.8541	0.0211	0.8753		3,490.0248	3,490.0248	0.1237		3,493.1161
<b>Total</b>	<b>2.6665</b>	<b>20.7515</b>	<b>18.9245</b>	<b>0.0827</b>	<b>4.3181</b>	<b>0.1317</b>	<b>4.4498</b>	<b>1.1703</b>	<b>0.1252</b>	<b>1.2955</b>		<b>8,466.8806</b>	<b>8,466.8806</b>	<b>0.5009</b>		<b>8,479.4042</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6962	19.5323	4.0801	0.0476	1.0979	0.1088	1.2067	0.3161	0.1041	0.4202		4,976.8558	4,976.8558	0.3773		4,986.2881
Worker	1.9704	1.2191	14.8445	0.0351	3.2202	0.0229	3.2431	0.8541	0.0211	0.8753		3,490.0248	3,490.0248	0.1237		3,493.1161
<b>Total</b>	<b>2.6665</b>	<b>20.7515</b>	<b>18.9245</b>	<b>0.0827</b>	<b>4.3181</b>	<b>0.1317</b>	<b>4.4498</b>	<b>1.1703</b>	<b>0.1252</b>	<b>1.2955</b>		<b>8,466.8806</b>	<b>8,466.8806</b>	<b>0.5009</b>		<b>8,479.4042</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.0315					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.3881</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.0315					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5925</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.5439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>27.7861</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3669	0.2270	2.7644	6.5300e-003	0.5997	4.2700e-003	0.6040	0.1591	3.9300e-003	0.1630		649.9281	649.9281	0.0230		650.5038
<b>Total</b>	<b>0.3669</b>	<b>0.2270</b>	<b>2.7644</b>	<b>6.5300e-003</b>	<b>0.5997</b>	<b>4.2700e-003</b>	<b>0.6040</b>	<b>0.1591</b>	<b>3.9300e-003</b>	<b>0.1630</b>		<b>649.9281</b>	<b>649.9281</b>	<b>0.0230</b>		<b>650.5038</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.5439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>27.6033</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3669	0.2270	2.7644	6.5300e-003	0.5997	4.2700e-003	0.6040	0.1591	3.9300e-003	0.1630		649.9281	649.9281	0.0230		650.5038
<b>Total</b>	<b>0.3669</b>	<b>0.2270</b>	<b>2.7644</b>	<b>6.5300e-003</b>	<b>0.5997</b>	<b>4.2700e-003</b>	<b>0.6040</b>	<b>0.1591</b>	<b>3.9300e-003</b>	<b>0.1630</b>		<b>649.9281</b>	<b>649.9281</b>	<b>0.0230</b>		<b>650.5038</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.0128	147.8145	250.3203	1.1494	82.8485	0.8423	83.6907	22.1920	0.7909	22.9829		117,038.5418	117,038.5418	4.3169		117,146.4636
Unmitigated	21.0128	147.8145	250.3203	1.1494	82.8485	0.8423	83.6907	22.1920	0.7909	22.9829		117,038.5418	117,038.5418	4.3169		117,146.4636

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
NaturalGas Unmitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	45.979	5.0000e- 004	4.5100e- 003	3.7900e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004		5.4093	5.4093	1.0000e- 004	1.0000e- 004	5.4414
<b>Total</b>		<b>5.0000e- 004</b>	<b>4.5100e- 003</b>	<b>3.7900e- 003</b>	<b>3.0000e- 005</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e- 004</b>	<b>1.0000e- 004</b>	<b>5.4414</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.045979	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
<b>Total</b>		<b>5.0000e-004</b>	<b>4.5100e-003</b>	<b>3.7900e-003</b>	<b>3.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.4414</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Unmitigated	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0569	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
<b>Total</b>	<b>13.6798</b>	<b>5.6000e-003</b>	<b>0.6181</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4500e-003</b>		<b>1.4146</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0569	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
<b>Total</b>	<b>13.6798</b>	<b>5.6000e-003</b>	<b>0.6181</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4500e-003</b>		<b>1.4146</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Trips and VMT - Not consistent with other Alternatives.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	264,772.00	200,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	794,315.00	600,000.00
tblArchitecturalCoating	ConstArea_Parking	35,010.00	28,000.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblTripsAndVMT	VendorTripNumber	182.00	162.00
tblTripsAndVMT	WorkerTripNumber	454.00	392.00
tblTripsAndVMT	WorkerTripNumber	91.00	73.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00
tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.1892	54.6055	37.0327	0.1047	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,563.66 09	10,563.66 09	1.9491	0.0000	10,594.21 76
2020	36.1382	56.6136	53.4543	0.1360	5.0410	2.1202	7.1612	1.3620	1.9862	3.3482	0.0000	13,560.55 26	13,560.55 26	1.9147	0.0000	13,608.42 00
Maximum	36.1382	56.6136	53.4543	0.1360	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	13,560.55 26	13,560.55 26	1.9491	0.0000	13,608.42 00

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.5019	41.4750	37.7427	0.1047	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	10,563.66 09	10,563.66 09	1.9491	0.0000	10,594.21 76
2020	33.7139	48.5564	57.1241	0.1360	5.0410	0.3806	5.4216	1.3620	0.3736	1.7356	0.0000	13,560.55 26	13,560.55 26	1.9147	0.0000	13,608.41 99
Maximum	33.7139	48.5564	57.1241	0.1360	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	13,560.55 26	13,560.55 26	1.9491	0.0000	13,608.41 99

	ROG	NOx	CO	SO2	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	9.95	19.05	-4.84	0.00	42.73	66.60	50.15	48.20	66.11	58.85	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	16.5236	154.1630	216.2214	1.0520	82.8485	0.8453	83.6937	22.1920	0.7938	22.9858		107,278.7967	107,278.7967	4.4237		107,389.3883
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>37.5933</b>	<b>187.2139</b>	<b>238.6485</b>	<b>1.1079</b>	<b>82.8485</b>	<b>2.1745</b>	<b>85.0230</b>	<b>22.1920</b>	<b>2.1230</b>	<b>24.3150</b>		<b>115,201.7504</b>	<b>115,201.7504</b>	<b>5.0244</b>	<b>1.0000e-004</b>	<b>115,327.3913</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**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	lb/day										lb/day					
Area	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	16.5236	154.1630	216.2214	1.0520	82.8485	0.8453	83.6937	22.1920	0.7938	22.9858		107,278.7967	107,278.7967	4.4237		107,389.3883
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>37.5933</b>	<b>187.2139</b>	<b>238.6485</b>	<b>1.1079</b>	<b>82.8485</b>	<b>2.1745</b>	<b>85.0230</b>	<b>22.1920</b>	<b>2.1230</b>	<b>24.3150</b>		<b>115,201.7504</b>	<b>115,201.7504</b>	<b>5.0244</b>	<b>1.0000e-004</b>	<b>115,327.3913</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 75.29**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 600,000; Non-Residential Outdoor: 200,000; Striped Parking Area: 28,000 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	392.00	162.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	73.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.3443	0.0000	12.3443	3.9929	0.0000	3.9929			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>12.3443</b>	<b>2.3827</b>	<b>14.7270</b>	<b>3.9929</b>	<b>2.1920</b>	<b>6.1849</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5549	0.0000	5.5549	1.7968	0.0000	1.7968			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>5.5549</b>	<b>1.1249</b>	<b>6.6798</b>	<b>1.7968</b>	<b>1.0439</b>	<b>2.8407</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9002	21.8779	5.5503	0.0464	1.0979	0.1735	1.2714	0.3161	0.1660	0.4821		4,847.003 4	4,847.003 4	0.4651		4,858.631 4
Worker	1.9278	1.6716	14.3186	0.0314	3.2202	0.0238	3.2439	0.8541	0.0219	0.8761		3,125.077 3	3,125.077 3	0.1258		3,128.222 7
<b>Total</b>	<b>2.8280</b>	<b>23.5495</b>	<b>19.8690</b>	<b>0.0778</b>	<b>4.3181</b>	<b>0.1973</b>	<b>4.5153</b>	<b>1.1703</b>	<b>0.1879</b>	<b>1.3582</b>		<b>7,972.080 7</b>	<b>7,972.080 7</b>	<b>0.5909</b>		<b>7,986.854 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9002	21.8779	5.5503	0.0464	1.0979	0.1735	1.2714	0.3161	0.1660	0.4821		4,847.003 4	4,847.003 4	0.4651		4,858.631 4
Worker	1.9278	1.6716	14.3186	0.0314	3.2202	0.0238	3.2439	0.8541	0.0219	0.8761		3,125.077 3	3,125.077 3	0.1258		3,128.222 7
<b>Total</b>	<b>2.8280</b>	<b>23.5495</b>	<b>19.8690</b>	<b>0.0778</b>	<b>4.3181</b>	<b>0.1973</b>	<b>4.5153</b>	<b>1.1703</b>	<b>0.1879</b>	<b>1.3582</b>		<b>7,972.080 7</b>	<b>7,972.080 7</b>	<b>0.5909</b>		<b>7,986.854 2</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7307	19.8943	4.8389	0.0461	1.0979	0.1113	1.2092	0.3161	0.1065	0.4226		4,812.721 1	4,812.721 1	0.4258		4,823.366 7
Worker	1.7261	1.4568	12.4814	0.0304	3.2202	0.0229	3.2431	0.8541	0.0211	0.8753		3,026.229 4	3,026.229 4	0.1063		3,028.887 6
<b>Total</b>	<b>2.4568</b>	<b>21.3511</b>	<b>17.3203</b>	<b>0.0765</b>	<b>4.3181</b>	<b>0.1342</b>	<b>4.4523</b>	<b>1.1703</b>	<b>0.1276</b>	<b>1.2979</b>		<b>7,838.950 5</b>	<b>7,838.950 5</b>	<b>0.5322</b>		<b>7,852.254 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7307	19.8943	4.8389	0.0461	1.0979	0.1113	1.2092	0.3161	0.1065	0.4226		4,812.721 1	4,812.721 1	0.4258		4,823.366 7
Worker	1.7261	1.4568	12.4814	0.0304	3.2202	0.0229	3.2431	0.8541	0.0211	0.8753		3,026.229 4	3,026.229 4	0.1063		3,028.887 6
<b>Total</b>	<b>2.4568</b>	<b>21.3511</b>	<b>17.3203</b>	<b>0.0765</b>	<b>4.3181</b>	<b>0.1342</b>	<b>4.4523</b>	<b>1.1703</b>	<b>0.1276</b>	<b>1.2979</b>		<b>7,838.950 5</b>	<b>7,838.950 5</b>	<b>0.5322</b>		<b>7,852.254 2</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	2.0315					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.3881</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.0315					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5925</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.5439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>27.7861</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3214	0.2713	2.3243	5.6600e-003	0.5997	4.2700e-003	0.6040	0.1591	3.9300e-003	0.1630		563.5580	563.5580	0.0198		564.0530
<b>Total</b>	<b>0.3214</b>	<b>0.2713</b>	<b>2.3243</b>	<b>5.6600e-003</b>	<b>0.5997</b>	<b>4.2700e-003</b>	<b>0.6040</b>	<b>0.1591</b>	<b>3.9300e-003</b>	<b>0.1630</b>		<b>563.5580</b>	<b>563.5580</b>	<b>0.0198</b>		<b>564.0530</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	27.5439					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>27.6033</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.3214	0.2713	2.3243	5.6600e-003	0.5997	4.2700e-003	0.6040	0.1591	3.9300e-003	0.1630		563.5580	563.5580	0.0198		564.0530
<b>Total</b>	<b>0.3214</b>	<b>0.2713</b>	<b>2.3243</b>	<b>5.6600e-003</b>	<b>0.5997</b>	<b>4.2700e-003</b>	<b>0.6040</b>	<b>0.1591</b>	<b>3.9300e-003</b>	<b>0.1630</b>		<b>563.5580</b>	<b>563.5580</b>	<b>0.0198</b>		<b>564.0530</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.5236	154.1630	216.2214	1.0520	82.8485	0.8453	83.6937	22.1920	0.7938	22.9858		107,278.7967	107,278.7967	4.4237		107,389.3883
Unmitigated	16.5236	154.1630	216.2214	1.0520	82.8485	0.8453	83.6937	22.1920	0.7938	22.9858		107,278.7967	107,278.7967	4.4237		107,389.3883

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
NaturalGas Unmitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	45.979	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
<b>Total</b>		<b>5.0000e-004</b>	<b>4.5100e-003</b>	<b>3.7900e-003</b>	<b>3.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.4414</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.045979	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
<b>Total</b>		<b>5.0000e-004</b>	<b>4.5100e-003</b>	<b>3.7900e-003</b>	<b>3.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.4414</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
Unmitigated	13.6798	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0569	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
<b>Total</b>	<b>13.6798</b>	<b>5.6000e-003</b>	<b>0.6181</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4500e-003</b>		<b>1.4146</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0569	5.6000e-003	0.6181	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3283	1.3283	3.4500e-003		1.4146
<b>Total</b>	<b>13.6798</b>	<b>5.6000e-003</b>	<b>0.6181</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4500e-003</b>		<b>1.4146</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## **11.0 Vegetation**

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.01	0.17	0.00	0.00	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.33	0.13	-0.03	0.00	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.38	0.24	-0.10	0.00	0.53	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.23	0.20	-0.17	0.00	0.88	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	2	2	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	2	2	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	9	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.53100E-002	1.75960E-001	1.91380E-001	3.10000E-004	1.15900E-002	1.15900E-002	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67332E+001
Cranes	5.44400E-002	6.47520E-001	2.53440E-001	6.90000E-004	2.67600E-002	2.46200E-002	0.00000E+000	6.04326E+001	6.04326E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	1.69500E-002	1.74320E-001	2.12110E-001	3.40000E-004	8.41000E-003	7.73000E-003	0.00000E+000	3.01396E+001	3.01396E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	5.92800E-002	5.33700E-001	4.82010E-001	6.20000E-004	3.99000E-002	3.67100E-002	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53324E+001
Generator Sets	5.47700E-002	4.76380E-001	5.04150E-001	8.90000E-004	2.70100E-002	2.70100E-002	0.00000E+000	7.68682E+001	7.68682E+001	4.37000E-003	0.00000E+000	7.69775E+001
Graders	1.58200E-002	2.13840E-001	5.97400E-002	2.20000E-004	6.86000E-003	6.31000E-003	0.00000E+000	1.93892E+001	1.93892E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	1.99600E-002	2.13580E-001	2.20270E-001	3.60000E-004	1.03800E-002	9.55000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	1.57700E-002	1.62740E-001	1.92610E-001	3.10000E-004	8.14000E-003	7.49000E-003	0.00000E+000	2.72012E+001	2.72012E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	1.58200E-002	1.58170E-001	1.43900E-001	2.00000E-004	1.00800E-002	9.28000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	1.13460E-001	1.20744E+000	4.28410E-001	8.50000E-004	5.88700E-002	5.41600E-002	0.00000E+000	7.66960E+001	7.66960E+001	2.42700E-002	0.00000E+000	7.73026E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84396E+001	8.84396E+001	2.79800E-002	0.00000E+000	8.91391E+001
Tractors/Loaders/Backhoes	1.11550E-001	1.12053E+000	1.17143E+000	1.59000E-003	7.23700E-002	6.65800E-002	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	4.70000E-002	2.14280E-001	2.40760E-001	3.50000E-004	1.19600E-002	1.19600E-002	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	6.21000E-003	1.41800E-001	1.91490E-001	3.10000E-004	1.49000E-003	1.49000E-003	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67331E+001
Cranes	1.68700E-002	3.26190E-001	3.65560E-001	6.90000E-004	1.86000E-003	1.86000E-003	0.00000E+000	6.04325E+001	6.04325E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	8.26000E-003	1.59690E-001	2.54670E-001	3.40000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.01395E+001	3.01395E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	1.53700E-002	3.50960E-001	4.73920E-001	6.20000E-004	3.69000E-003	3.69000E-003	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53323E+001
Generator Sets	1.78900E-002	4.08530E-001	5.51660E-001	8.90000E-004	4.29000E-003	4.29000E-003	0.00000E+000	7.68681E+001	7.68681E+001	4.37000E-003	0.00000E+000	7.69774E+001
Graders	5.27000E-003	1.01960E-001	1.14260E-001	2.20000E-004	5.80000E-004	5.80000E-004	0.00000E+000	1.93891E+001	1.93891E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	8.78000E-003	1.69790E-001	2.70790E-001	3.60000E-004	1.23000E-003	1.23000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	7.64000E-003	1.47780E-001	2.35680E-001	3.10000E-004	1.07000E-003	1.07000E-003	0.00000E+000	2.72011E+001	2.72011E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	4.89000E-003	1.11650E-001	1.50770E-001	2.00000E-004	1.17000E-003	1.17000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	2.09100E-002	4.04270E-001	4.53060E-001	8.50000E-004	2.30000E-003	2.30000E-003	0.00000E+000	7.66959E+001	7.66959E+001	2.42700E-002	0.00000E+000	7.73025E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84395E+001	8.84395E+001	2.79800E-002	0.00000E+000	8.91390E+001
Tractors/Loaders/Balckhoes	3.88900E-002	8.88010E-001	1.19914E+000	1.59000E-003	9.33000E-003	9.33000E-003	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	1.44000E-002	2.29890E-001	2.03570E-001	3.50000E-004	2.09000E-003	2.09000E-003	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.54642E-001	1.94135E-001	-5.74773E-004	0.00000E+000	8.71441E-001	8.71441E-001	0.00000E+000	1.12437E-006	1.12437E-006	0.00000E+000	0.00000E+000	1.49627E-006
Cranes	6.90118E-001	4.96247E-001	-4.42393E-001	0.00000E+000	9.30493E-001	9.24452E-001	0.00000E+000	1.15832E-006	1.15832E-006	0.00000E+000	0.00000E+000	1.14904E-006
Excavators	5.12684E-001	8.39261E-002	-2.00651E-001	0.00000E+000	8.62069E-001	8.49935E-001	0.00000E+000	1.32716E-006	1.32716E-006	0.00000E+000	0.00000E+000	9.87559E-007
Forklifts	7.40722E-001	3.42402E-001	1.67839E-002	0.00000E+000	9.07519E-001	8.99482E-001	0.00000E+000	1.09311E-006	1.09311E-006	0.00000E+000	0.00000E+000	1.26508E-006
Generator Sets	6.73361E-001	1.42428E-001	-9.42378E-002	0.00000E+000	8.41170E-001	8.41170E-001	0.00000E+000	1.17084E-006	1.17084E-006	0.00000E+000	0.00000E+000	1.29908E-006
Graders	6.66877E-001	5.23195E-001	-9.12621E-001	0.00000E+000	9.15452E-001	9.08082E-001	0.00000E+000	1.03150E-006	1.03150E-006	0.00000E+000	0.00000E+000	1.53511E-006
Pavers	5.60120E-001	2.05029E-001	-2.29355E-001	0.00000E+000	8.81503E-001	8.71204E-001	0.00000E+000	1.27432E-006	1.27432E-006	0.00000E+000	0.00000E+000	1.26410E-006
Paving Equipment	5.15536E-001	9.19258E-002	-2.23612E-001	0.00000E+000	8.68550E-001	8.57143E-001	0.00000E+000	1.47053E-006	1.47053E-006	0.00000E+000	0.00000E+000	1.09405E-006
Rollers	6.90898E-001	2.94114E-001	-4.77415E-002	0.00000E+000	8.83929E-001	8.73922E-001	0.00000E+000	1.14176E-006	1.14176E-006	0.00000E+000	0.00000E+000	1.13260E-006
Rubber Tired Dozers	8.15706E-001	6.65184E-001	-5.75383E-002	0.00000E+000	9.60931E-001	9.57533E-001	0.00000E+000	1.17346E-006	1.17346E-006	0.00000E+000	0.00000E+000	1.29362E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13072E-006	1.13072E-006	0.00000E+000	0.00000E+000	1.23403E-006
Tractors/Loaders/Backhoes	6.51367E-001	2.07509E-001	-2.36548E-002	0.00000E+000	8.71079E-001	8.59868E-001	0.00000E+000	1.13612E-006	1.13612E-006	0.00000E+000	0.00000E+000	1.19752E-006
Welders	6.93617E-001	-7.28486E-002	1.54469E-001	0.00000E+000	8.25251E-001	8.25251E-001	0.00000E+000	1.17197E-006	1.17197E-006	0.00000E+000	0.00000E+000	1.16761E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00



No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.06	0.02	0.06	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.56	0.15	0.56	0.15	0.00	0.00
Grading	Fugitive Dust	0.40	0.13	0.18	0.06	0.55	0.55
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.41	0.22	0.18	0.10	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.02	29.11	29.60	29.57	29.28
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.45		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

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## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019



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tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00

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tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00

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tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00

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tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00
tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00

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tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## 2.1 Overall Construction

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

### 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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

[illegible]

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.0358	0.0358
		Highest	0.0358	0.0358

**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	2.4913	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154
Energy	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	513.1487	513.1487	0.0232	4.8100e-003	515.1612
Mobile	1.6550	21.3216	20.5323	0.1701	14.3513	0.0654	14.4166	3.8565	0.0613	3.9179	0.0000	15,823.1871	15,823.1871	0.6288	0.0000	15,838.9074
Stationary	0.0543	0.2427	0.3090	1.4300e-003		0.0218	0.0218		0.0218	0.0218	0.0000	240.9652	240.9652	7.0400e-003	0.0000	241.1413
Waste						0.0000	0.0000		0.0000	0.0000	238.7174	0.0000	238.7174	14.1078	0.0000	591.4122
Water						0.0000	0.0000		0.0000	0.0000	23.1943	119.0026	142.1969	2.3877	0.0574	218.9827
<b>Total</b>	<b>4.2007</b>	<b>21.5657</b>	<b>20.8974</b>	<b>0.1716</b>	<b>14.3513</b>	<b>0.0874</b>	<b>14.4386</b>	<b>3.8565</b>	<b>0.0834</b>	<b>3.9399</b>	<b>261.9116</b>	<b>16,696.4120</b>	<b>16,958.3236</b>	<b>17.1548</b>	<b>0.0622</b>	<b>17,405.7202</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4913	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154
Energy	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	513.1487	513.1487	0.0232	4.8100e-003	515.1612
Mobile	1.6550	21.3216	20.5323	0.1701	14.3513	0.0654	14.4166	3.8565	0.0613	3.9179	0.0000	15,823.1871	15,823.1871	0.6288	0.0000	15,838.9074
Stationary	0.0543	0.2427	0.3090	1.4300e-003		0.0218	0.0218		0.0218	0.0218	0.0000	240.9652	240.9652	7.0400e-003	0.0000	241.1413
Waste						0.0000	0.0000		0.0000	0.0000	238.7174	0.0000	238.7174	14.1078	0.0000	591.4122
Water						0.0000	0.0000		0.0000	0.0000	16.3288	84.4676	100.7964	1.6809	0.0404	154.8563
<b>Total</b>	<b>4.2007</b>	<b>21.5657</b>	<b>20.8974</b>	<b>0.1716</b>	<b>14.3513</b>	<b>0.0874</b>	<b>14.4386</b>	<b>3.8565</b>	<b>0.0834</b>	<b>3.9399</b>	<b>255.0461</b>	<b>16,661.8770</b>	<b>16,916.9232</b>	<b>16.4480</b>	<b>0.0452</b>	<b>17,341.5938</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.62</b>	<b>0.21</b>	<b>0.24</b>	<b>4.12</b>	<b>27.30</b>	<b>0.37</b>



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**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-387.9000
<b>Total</b>	<b>-387.9000</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 75.29****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**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					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.6550	21.3216	20.5323	0.1701	14.3513	0.0654	14.4166	3.8565	0.0613	3.9179	0.0000	15,823.18 71	15,823.18 71	0.6288	0.0000	15,838.90 74
Unmitigated	1.6550	21.3216	20.5323	0.1701	14.3513	0.0654	14.4166	3.8565	0.0613	3.9179	0.0000	15,823.18 71	15,823.18 71	0.6288	0.0000	15,838.90 74

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	512.2531	512.2531	0.0232	4.7900e-003	514.2603
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	512.2531	512.2531	0.0232	4.7900e-003	514.2603
NaturalGas Mitigated	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
NaturalGas Unmitigated	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009

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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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	16782.4	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
<b>Total</b>		<b>9.0000e-005</b>	<b>8.2000e-004</b>	<b>6.9000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.8956</b>	<b>0.8956</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9009</b>



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**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	16782.4	9.0000e-005	8.2000e-004	6.9000e-004	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.8956	0.8956	2.0000e-005	2.0000e-005	0.9009
<b>Total</b>		<b>9.0000e-005</b>	<b>8.2000e-004</b>	<b>6.9000e-004</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.8956</b>	<b>0.8956</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.9009</b>

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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			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.76086e+006	512.2531	0.0232	4.7900e-003	514.2603
<b>Total</b>		<b>512.2531</b>	<b>0.0232</b>	<b>4.7900e-003</b>	<b>514.2603</b>

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**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1.76086e+006	512.2531	0.0232	4.7900e-003	514.2603
<b>Total</b>		<b>512.2531</b>	<b>0.0232</b>	<b>4.7900e-003</b>	<b>514.2603</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	2.4913	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154
Unmitigated	2.4913	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154

## 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	0.3803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0700e-003	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154
<b>Total</b>	<b>2.4913</b>	<b>5.0000e-004</b>	<b>0.0554</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1085</b>	<b>0.1085</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1154</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**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	0.3803					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0700e-003	5.0000e-004	0.0554	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1085	0.1085	2.8000e-004	0.0000	0.1154
<b>Total</b>	<b>2.4913</b>	<b>5.0000e-004</b>	<b>0.0554</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1085</b>	<b>0.1085</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1154</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	100.7964	1.6809	0.0404	154.8563
Unmitigated	142.1969	2.3877	0.0574	218.9827

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	1.39166 / 0.073272	2.7068	0.0455	1.0900e-003	4.1684
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	26.0064 / 1.36926	50.5820	0.8493	0.0204	77.8961
Movie Theater (No Matinee)	9.94043 / 0.523374	19.3340	0.3246	7.8000e-003	29.7743
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	17.948 / 0.94498	34.9086	0.5862	0.0141	53.7591
User Defined Recreational	17.823 / 0.938402	34.6656	0.5821	0.0140	53.3848
<b>Total</b>		<b>142.1969</b>	<b>2.3877</b>	<b>0.0574</b>	<b>218.9827</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0.979729 / 0.0644794	1.9187	0.0320	7.7000e-004	2.9477
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	18.3085 / 1.20495	35.8551	0.5979	0.0144	55.0852
Movie Theater (No Matinee)	6.99806 / 0.460569	13.7049	0.2286	5.4900e-003	21.0552
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.6354 / 0.831582	24.7450	0.4127	9.9200e-003	38.0164
User Defined Recreational	12.5474 / 0.825794	24.5727	0.4098	9.8500e-003	37.7518
<b>Total</b>		<b>100.7964</b>	<b>1.6809</b>	<b>0.0404</b>	<b>154.8563</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	238.7174	14.1078	0.0000	591.4122
Unmitigated	238.7174	14.1078	0.0000	591.4122

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1176	238.7174	14.1078	0.0000	591.4122
<b>Total</b>		<b>238.7174</b>	<b>14.1078</b>	<b>0.0000</b>	<b>591.4122</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1176	238.7174	14.1078	0.0000	591.4122
<b>Total</b>		<b>238.7174</b>	<b>14.1078</b>	<b>0.0000</b>	<b>591.4122</b>

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0112	0.0497	0.1989	1.2200e-003		0.0154	0.0154		0.0154	0.0154	0.0000	220.9299	220.9299	4.2300e-003	0.0000	221.0358
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0543</b>	<b>0.2427</b>	<b>0.3090</b>	<b>1.4300e-003</b>		<b>0.0218</b>	<b>0.0218</b>		<b>0.0218</b>	<b>0.0218</b>	<b>0.0000</b>	<b>240.9652</b>	<b>240.9652</b>	<b>7.0400e-003</b>	<b>0.0000</b>	<b>241.1413</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-387.9000	0.0000	0.0000	-387.9000

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 142	-387.9000	0.0000	0.0000	-387.9000
<b>Total</b>		<b>-387.9000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-387.9000</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00
tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

[illegible]

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	10.6972	115.6271	131.3682	0.9903	82.7981	0.3590	83.1571	22.1581	0.3369	22.4950		101,398.7121	101,398.7121	3.7059		101,491.3593
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>31.7663</b>	<b>148.6779</b>	<b>153.7930</b>	<b>1.0461</b>	<b>82.7981</b>	<b>1.6882</b>	<b>84.4863</b>	<b>22.1581</b>	<b>1.6661</b>	<b>23.8242</b>		<b>109,321.6658</b>	<b>109,321.6658</b>	<b>4.3066</b>	<b>1.0000e-004</b>	<b>109,429.3616</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**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	lb/day										lb/day					
Area	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	10.6972	115.6271	131.3682	0.9903	82.7981	0.3590	83.1571	22.1581	0.3369	22.4950		101,398.7121	101,398.7121	3.7059		101,491.3593
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>31.7663</b>	<b>148.6779</b>	<b>153.7930</b>	<b>1.0461</b>	<b>82.7981</b>	<b>1.6882</b>	<b>84.4863</b>	<b>22.1581</b>	<b>1.6661</b>	<b>23.8242</b>		<b>109,321.6658</b>	<b>109,321.6658</b>	<b>4.3066</b>	<b>1.0000e-004</b>	<b>109,429.3616</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**Acres of Paving: 75.29****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.6972	115.6271	131.3682	0.9903	82.7981	0.3590	83.1571	22.1581	0.3369	22.4950		101,398.7121	101,398.7121	3.7059		101,491.3593
Unmitigated	10.6972	115.6271	131.3682	0.9903	82.7981	0.3590	83.1571	22.1581	0.3369	22.4950		101,398.7121	101,398.7121	3.7059		101,491.3593

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
NaturalGas Unmitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	45.979	5.0000e- 004	4.5100e- 003	3.7900e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004		5.4093	5.4093	1.0000e- 004	1.0000e- 004	5.4414
<b>Total</b>		<b>5.0000e- 004</b>	<b>4.5100e- 003</b>	<b>3.7900e- 003</b>	<b>3.0000e- 005</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e- 004</b>	<b>1.0000e- 004</b>	<b>5.4414</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.045979	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
<b>Total</b>		<b>5.0000e-004</b>	<b>4.5100e-003</b>	<b>3.7900e-003</b>	<b>3.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.4414</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Unmitigated	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0563	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
<b>Total</b>	<b>13.6793</b>	<b>5.5300e-003</b>	<b>0.6157</b>	<b>5.0000e-005</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4200e-003</b>		<b>1.4138</b>



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0563	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
<b>Total</b>	<b>13.6793</b>	<b>5.5300e-003</b>	<b>0.6157</b>	<b>5.0000e-005</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4200e-003</b>		<b>1.4138</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.36	583,500.00	0
Parking Lot	600.00	Space	58.93	0.00	0
Arena	10.08	1000sqft	0.28	10,080.00	0
Hotel	250.00	Room	5.28	188,368.00	0
Movie Theater (No Matinee)	3,300.00	Seat	2.02	72,000.00	0
User Defined Recreational	129.09	User Defined Unit	3.62	129,095.00	0
Regional Shopping Center	130.00	1000sqft	3.64	130,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00
tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.64
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	363,000.00	188,368.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	129,095.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	188,368.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	129,095.00
tblLandUse	LotAcreage	14.85	16.36
tblLandUse	LotAcreage	5.40	58.93
tblLandUse	LotAcreage	3.24	0.28
tblLandUse	LotAcreage	8.33	5.28
tblLandUse	LotAcreage	1.70	2.02
tblLandUse	LotAcreage	0.00	3.62
tblLandUse	LotAcreage	2.98	3.64
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	136.50	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,176.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	1,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	21.26
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	21.26
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	21.26
tblWater	IndoorWaterUseRate	4,342,162.79	1,391,660.00
tblWater	IndoorWaterUseRate	6,341,692.50	26,006,368.00
tblWater	IndoorWaterUseRate	29,818,908.53	9,940,428.00
tblWater	IndoorWaterUseRate	9,629,427.79	17,947,995.00
tblWater	IndoorWaterUseRate	0.00	17,823,049.00
tblWater	OutdoorWaterUseRate	277,159.33	73,272.00
tblWater	OutdoorWaterUseRate	704,632.50	1,369,262.00

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

tblWater	OutdoorWaterUseRate	1,903,334.59	523,374.00
tblWater	OutdoorWaterUseRate	5,901,907.36	944,980.00
tblWater	OutdoorWaterUseRate	0.00	938,402.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874

[illegible]

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	8.8402	117.6382	113.2580	0.9142	82.7981	0.3602	83.1584	22.1581	0.3381	22.4962		93,742.2132	93,742.2132	4.0367		93,843.1311
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>29.9094</b>	<b>150.6890</b>	<b>135.6828</b>	<b>0.9700</b>	<b>82.7981</b>	<b>1.6894</b>	<b>84.4876</b>	<b>22.1581</b>	<b>1.6673</b>	<b>23.8254</b>		<b>101,665.1669</b>	<b>101,665.1669</b>	<b>4.6375</b>	<b>1.0000e-004</b>	<b>101,781.1333</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**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	lb/day										lb/day					
Area	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Energy	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
Mobile	8.8402	117.6382	113.2580	0.9142	82.7981	0.3602	83.1584	22.1581	0.3381	22.4962		93,742.2132	93,742.2132	4.0367		93,843.1311
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>29.9094</b>	<b>150.6890</b>	<b>135.6828</b>	<b>0.9700</b>	<b>82.7981</b>	<b>1.6894</b>	<b>84.4876</b>	<b>22.1581</b>	<b>1.6673</b>	<b>23.8254</b>		<b>101,665.1669</b>	<b>101,665.1669</b>	<b>4.6375</b>	<b>1.0000e-004</b>	<b>101,781.1333</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**Acres of Paving: 75.29****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**4.0 Operational Detail - Mobile**



## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.8402	117.6382	113.2580	0.9142	82.7981	0.3602	83.1584	22.1581	0.3381	22.4962		93,742.21 32	93,742.21 32	4.0367		93,843.13 11
Unmitigated	8.8402	117.6382	113.2580	0.9142	82.7981	0.3602	83.1584	22.1581	0.3381	22.4962		93,742.21 32	93,742.21 32	4.0367		93,843.13 11

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,927.60	2,927.60	2,927.60	12,267,322	12,267,322
User Defined Recreational	2,744.45	2,744.45	2,744.45	17,601,446	17,601,446
Total	7,616.51	7,616.51	7,616.51	38,677,137	38,677,137

## 4.3 Trip Type Information

**Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter**

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

#### 5.0 Energy Detail

Historical Energy Use: N

#### 5.1 Mitigation Measures Energy

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
NaturalGas Unmitigated	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	45.979	5.0000e- 004	4.5100e- 003	3.7900e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004		5.4093	5.4093	1.0000e- 004	1.0000e- 004	5.4414
<b>Total</b>		<b>5.0000e- 004</b>	<b>4.5100e- 003</b>	<b>3.7900e- 003</b>	<b>3.0000e- 005</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>3.4000e- 004</b>	<b>3.4000e- 004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e- 004</b>	<b>1.0000e- 004</b>	<b>5.4414</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.045979	5.0000e-004	4.5100e-003	3.7900e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004		5.4093	5.4093	1.0000e-004	1.0000e-004	5.4414
<b>Total</b>		<b>5.0000e-004</b>	<b>4.5100e-003</b>	<b>3.7900e-003</b>	<b>3.0000e-005</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>3.4000e-004</b>	<b>3.4000e-004</b>		<b>5.4093</b>	<b>5.4093</b>	<b>1.0000e-004</b>	<b>1.0000e-004</b>	<b>5.4414</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
Unmitigated	13.6793	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0563	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
<b>Total</b>	<b>13.6793</b>	<b>5.5300e-003</b>	<b>0.6157</b>	<b>5.0000e-005</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4200e-003</b>		<b>1.4138</b>

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0840					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5389					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0563	5.5300e-003	0.6157	5.0000e-005		2.1800e-003	2.1800e-003		2.1800e-003	2.1800e-003		1.3283	1.3283	3.4200e-003		1.4138
<b>Total</b>	<b>13.6793</b>	<b>5.5300e-003</b>	<b>0.6157</b>	<b>5.0000e-005</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>2.1800e-003</b>	<b>2.1800e-003</b>		<b>1.3283</b>	<b>1.3283</b>	<b>3.4200e-003</b>		<b>1.4138</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	1380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>



Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C - Shasta County, Winter

## **11.0 Vegetation**

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## Redding Rancheria Fee-to-Trust and Gaming Project - Alternative C

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12482E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12481E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.89031E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
No	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.02	0.01	0.02	0.01	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.02	29.11	29.60	29.57	29.28
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.45		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

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tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	NumDays	740.00	228.00
tblConstructionPhase	NumDays	75.00	22.00
tblConstructionPhase	NumDays	55.00	54.00
tblConstructionPhase	NumDays	30.00	23.00
tblConstructionPhase	PhaseEndDate	4/30/2021	7/31/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/15/2020
tblConstructionPhase	PhaseStartDate	9/30/2020	3/15/2020
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	7/16/2020	4/1/2020
tblEnergyUse	LightingElect	6.34	0.00

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tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	55.00	187.50
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31

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tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00

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tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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					
2019	0.2528	2.4490	1.7129	3.7000e-003	0.4472	0.1132	0.5604	0.1814	0.1054	0.2868	0.0000	334.0051	334.0051	0.0657	0.0000	335.6480
2020	2.5042	2.4215	2.2040	5.0100e-003	0.1294	0.1085	0.2379	0.0352	0.1020	0.1371	0.0000	448.2750	448.2750	0.0717	0.0000	450.0679
Maximum	2.5042	2.4490	2.2040	5.0100e-003	0.4472	0.1132	0.5604	0.1814	0.1054	0.2868	0.0000	448.2750	448.2750	0.0717	0.0000	450.0679

**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					
2019	0.1202	1.7017	1.7905	3.7000e-003	0.2418	0.0233	0.2651	0.0927	0.0223	0.1149	0.0000	334.0049	334.0049	0.0657	0.0000	335.6477
2020	2.3717	1.9807	2.3477	5.0100e-003	0.1294	0.0166	0.1460	0.0352	0.0164	0.0515	0.0000	448.2747	448.2747	0.0717	0.0000	450.0676
Maximum	2.3717	1.9807	2.3477	5.0100e-003	0.2418	0.0233	0.2651	0.0927	0.0223	0.1149	0.0000	448.2747	448.2747	0.0717	0.0000	450.0676

	ROG	NOx	CO	SO2	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	9.62	24.40	-5.65	0.00	35.62	81.99	48.50	40.98	81.36	60.73	0.00	0.00	0.00	0.01	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.5744	0.9861
2	10-1-2019	12-31-2019	1.1166	0.8360
3	1-1-2020	3-31-2020	1.2821	1.0708
4	4-1-2020	6-30-2020	2.9528	2.6312
5	7-1-2020	9-30-2020	0.6754	0.6355
		Highest	2.9528	2.6312

## 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	1.4517	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Energy	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	100.7145	100.7145	4.5500e-003	9.4000e-004	101.1095
Mobile	1.6034	14.1663	18.6626	0.0922	6.5914	0.0714	6.6628	1.7730	0.0670	1.8400	0.0000	8,535.706 1	8,535.706 1	0.3696	0.0000	8,544.945 1
Stationary	0.0406	0.1813	0.2838	1.4300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	247.0943	247.0943	6.3500e-003	0.0000	247.2531
Waste						0.0000	0.0000		0.0000	0.0000	22.7350	0.0000	22.7350	1.3436	0.0000	56.3250
Water						0.0000	0.0000		0.0000	0.0000	8.4301	43.7207	52.1508	0.8678	0.0209	80.0608
<b>Total</b>	<b>3.0957</b>	<b>14.3478</b>	<b>18.9507</b>	<b>0.0937</b>	<b>6.5914</b>	<b>0.0920</b>	<b>6.6834</b>	<b>1.7730</b>	<b>0.0876</b>	<b>1.8606</b>	<b>31.1651</b>	<b>8,927.243 7</b>	<b>8,958.408 8</b>	<b>2.5919</b>	<b>0.0218</b>	<b>9,029.702 1</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.4517	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Energy	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	100.7145	100.7145	4.5500e-003	9.4000e-004	101.1095
Mobile	1.6034	14.1663	18.6626	0.0922	6.5914	0.0714	6.6628	1.7730	0.0670	1.8400	0.0000	8,535.706 1	8,535.706 1	0.3696	0.0000	8,544.945 1
Stationary	0.0406	0.1813	0.2838	1.4300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	247.0943	247.0943	6.3500e-003	0.0000	247.2531
Waste						0.0000	0.0000		0.0000	0.0000	22.7350	0.0000	22.7350	1.3436	0.0000	56.3250
Water						0.0000	0.0000		0.0000	0.0000	7.4185	38.4742	45.8927	0.7637	0.0184	70.4535
<b>Total</b>	<b>3.0957</b>	<b>14.3478</b>	<b>18.9507</b>	<b>0.0937</b>	<b>6.5914</b>	<b>0.0920</b>	<b>6.6834</b>	<b>1.7730</b>	<b>0.0876</b>	<b>1.8606</b>	<b>30.1535</b>	<b>8,921.997 3</b>	<b>8,952.150 7</b>	<b>2.4878</b>	<b>0.0193</b>	<b>9,020.094 8</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.25</b>	<b>0.06</b>	<b>0.07</b>	<b>4.02</b>	<b>11.47</b>	<b>0.11</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-176.7100
<b>Total</b>	<b>-176.7100</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/31/2019	5	23	
2	Grading	Grading	8/1/2019	8/31/2019	5	22	
3	Building Construction	Building Construction	9/1/2019	7/15/2020	5	228	
4	Paving	Paving	4/1/2020	6/15/2020	5	54	
5	Architectural Coating	Architectural Coating	3/15/2020	7/31/2020	5	100	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 187.5****Acres of Paving: 25.59**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 470,952; Non-Residential Outdoor: 156,984; Striped Parking Area: 4,800 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	153.00	65.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2078	0.0000	0.2078	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0499	0.5241	0.2537	4.4000e-004		0.0275	0.0275		0.0253	0.0253	0.0000	39.2940	39.2940	0.0124	0.0000	39.6048
<b>Total</b>	<b>0.0499</b>	<b>0.5241</b>	<b>0.2537</b>	<b>4.4000e-004</b>	<b>0.2078</b>	<b>0.0275</b>	<b>0.2353</b>	<b>0.1142</b>	<b>0.0253</b>	<b>0.1395</b>	<b>0.0000</b>	<b>39.2940</b>	<b>39.2940</b>	<b>0.0124</b>	<b>0.0000</b>	<b>39.6048</b>

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**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.6000e-004	7.9000e-004	7.5000e-003	2.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.5468	1.5468	6.0000e-005	0.0000	1.5484
<b>Total</b>	<b>9.6000e-004</b>	<b>7.9000e-004</b>	<b>7.5000e-003</b>	<b>2.0000e-005</b>	<b>1.6200e-003</b>	<b>1.0000e-005</b>	<b>1.6300e-003</b>	<b>4.3000e-004</b>	<b>1.0000e-005</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>1.5468</b>	<b>1.5468</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.5484</b>

**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					0.0935	0.0000	0.0935	0.0514	0.0000	0.0514	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.2193	0.2640	4.4000e-004		1.6300e-003	1.6300e-003		1.6300e-003	1.6300e-003	0.0000	39.2939	39.2939	0.0124	0.0000	39.6048
<b>Total</b>	<b>0.0107</b>	<b>0.2193</b>	<b>0.2640</b>	<b>4.4000e-004</b>	<b>0.0935</b>	<b>1.6300e-003</b>	<b>0.0951</b>	<b>0.0514</b>	<b>1.6300e-003</b>	<b>0.0530</b>	<b>0.0000</b>	<b>39.2939</b>	<b>39.2939</b>	<b>0.0124</b>	<b>0.0000</b>	<b>39.6048</b>

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**3.2 Site Preparation - 2019****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	9.6000e-004	7.9000e-004	7.5000e-003	2.0000e-005	1.6200e-003	1.0000e-005	1.6300e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.5468	1.5468	6.0000e-005	0.0000	1.5484
<b>Total</b>	<b>9.6000e-004</b>	<b>7.9000e-004</b>	<b>7.5000e-003</b>	<b>2.0000e-005</b>	<b>1.6200e-003</b>	<b>1.0000e-005</b>	<b>1.6300e-003</b>	<b>4.3000e-004</b>	<b>1.0000e-005</b>	<b>4.4000e-004</b>	<b>0.0000</b>	<b>1.5468</b>	<b>1.5468</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.5484</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1657	0.0000	0.1657	0.0472	0.0000	0.0472	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0521	0.5997	0.3671	6.8000e-004		0.0262	0.0262		0.0241	0.0241	0.0000	61.2715	61.2715	0.0194	0.0000	61.7561
<b>Total</b>	<b>0.0521</b>	<b>0.5997</b>	<b>0.3671</b>	<b>6.8000e-004</b>	<b>0.1657</b>	<b>0.0262</b>	<b>0.1919</b>	<b>0.0472</b>	<b>0.0241</b>	<b>0.0713</b>	<b>0.0000</b>	<b>61.2715</b>	<b>61.2715</b>	<b>0.0194</b>	<b>0.0000</b>	<b>61.7561</b>



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**3.3 Grading - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0200e-003	8.4000e-004	7.9700e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7300e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.6440	1.6440	6.0000e-005	0.0000	1.6456
<b>Total</b>	<b>1.0200e-003</b>	<b>8.4000e-004</b>	<b>7.9700e-003</b>	<b>2.0000e-005</b>	<b>1.7200e-003</b>	<b>1.0000e-005</b>	<b>1.7300e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.6440</b>	<b>1.6440</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.6456</b>

**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					0.0746	0.0000	0.0746	0.0212	0.0000	0.0212	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0320	0.4553	0.4036	6.8000e-004		0.0124	0.0124		0.0115	0.0115	0.0000	61.2714	61.2714	0.0194	0.0000	61.7560
<b>Total</b>	<b>0.0320</b>	<b>0.4553</b>	<b>0.4036</b>	<b>6.8000e-004</b>	<b>0.0746</b>	<b>0.0124</b>	<b>0.0869</b>	<b>0.0212</b>	<b>0.0115</b>	<b>0.0327</b>	<b>0.0000</b>	<b>61.2714</b>	<b>61.2714</b>	<b>0.0194</b>	<b>0.0000</b>	<b>61.7560</b>

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**3.3 Grading - 2019****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	1.0200e-003	8.4000e-004	7.9700e-003	2.0000e-005	1.7200e-003	1.0000e-005	1.7300e-003	4.6000e-004	1.0000e-005	4.7000e-004	0.0000	1.6440	1.6440	6.0000e-005	0.0000	1.6456
<b>Total</b>	<b>1.0200e-003</b>	<b>8.4000e-004</b>	<b>7.9700e-003</b>	<b>2.0000e-005</b>	<b>1.7200e-003</b>	<b>1.0000e-005</b>	<b>1.7300e-003</b>	<b>4.6000e-004</b>	<b>1.0000e-005</b>	<b>4.7000e-004</b>	<b>0.0000</b>	<b>1.6440</b>	<b>1.6440</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>1.6456</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1027	0.9169	0.7466	1.1700e-003		0.0561	0.0561		0.0528	0.0528	0.0000	102.2703	102.2703	0.0249	0.0000	102.8932
<b>Total</b>	<b>0.1027</b>	<b>0.9169</b>	<b>0.7466</b>	<b>1.1700e-003</b>		<b>0.0561</b>	<b>0.0561</b>		<b>0.0528</b>	<b>0.0528</b>	<b>0.0000</b>	<b>102.2703</b>	<b>102.2703</b>	<b>0.0249</b>	<b>0.0000</b>	<b>102.8932</b>

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**3.4 Building Construction - 2019****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	0.0152	0.3812	0.0888	8.3000e-004	0.0184	2.9900e-003	0.0214	5.3300e-003	2.8600e-003	8.1900e-003	0.0000	78.2448	78.2448	6.9000e-003	0.0000	78.4172
Worker	0.0309	0.0255	0.2411	5.5000e-004	0.0520	4.0000e-004	0.0524	0.0139	3.7000e-004	0.0142	0.0000	49.7338	49.7338	1.9600e-003	0.0000	49.7828
<b>Total</b>	<b>0.0462</b>	<b>0.4067</b>	<b>0.3299</b>	<b>1.3800e-003</b>	<b>0.0704</b>	<b>3.3900e-003</b>	<b>0.0738</b>	<b>0.0192</b>	<b>3.2300e-003</b>	<b>0.0224</b>	<b>0.0000</b>	<b>127.9786</b>	<b>127.9786</b>	<b>8.8600e-003</b>	<b>0.0000</b>	<b>128.2000</b>

**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	0.0293	0.6188	0.7775	1.1700e-003		5.9000e-003	5.9000e-003		5.9000e-003	5.9000e-003	0.0000	102.2702	102.2702	0.0249	0.0000	102.8931
<b>Total</b>	<b>0.0293</b>	<b>0.6188</b>	<b>0.7775</b>	<b>1.1700e-003</b>		<b>5.9000e-003</b>	<b>5.9000e-003</b>		<b>5.9000e-003</b>	<b>5.9000e-003</b>	<b>0.0000</b>	<b>102.2702</b>	<b>102.2702</b>	<b>0.0249</b>	<b>0.0000</b>	<b>102.8931</b>

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**3.4 Building Construction - 2019****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	0.0152	0.3812	0.0888	8.3000e-004	0.0184	2.9900e-003	0.0214	5.3300e-003	2.8600e-003	8.1900e-003	0.0000	78.2448	78.2448	6.9000e-003	0.0000	78.4172
Worker	0.0309	0.0255	0.2411	5.5000e-004	0.0520	4.0000e-004	0.0524	0.0139	3.7000e-004	0.0142	0.0000	49.7338	49.7338	1.9600e-003	0.0000	49.7828
<b>Total</b>	<b>0.0462</b>	<b>0.4067</b>	<b>0.3299</b>	<b>1.3800e-003</b>	<b>0.0704</b>	<b>3.3900e-003</b>	<b>0.0738</b>	<b>0.0192</b>	<b>3.2300e-003</b>	<b>0.0224</b>	<b>0.0000</b>	<b>127.9786</b>	<b>127.9786</b>	<b>8.8600e-003</b>	<b>0.0000</b>	<b>128.2000</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1495	1.3526	1.1878	1.9000e-003		0.0788	0.0788		0.0741	0.0741	0.0000	163.2850	163.2850	0.0398	0.0000	164.2809
<b>Total</b>	<b>0.1495</b>	<b>1.3526</b>	<b>1.1878</b>	<b>1.9000e-003</b>		<b>0.0788</b>	<b>0.0788</b>		<b>0.0741</b>	<b>0.0741</b>	<b>0.0000</b>	<b>163.2850</b>	<b>163.2850</b>	<b>0.0398</b>	<b>0.0000</b>	<b>164.2809</b>

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**3.4 Building Construction - 2020****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	0.0200	0.5624	0.1249	1.3300e-003	0.0298	3.1100e-003	0.0329	8.6400e-003	2.9700e-003	0.0116	0.0000	125.9442	125.9442	0.0102	0.0000	126.1995
Worker	0.0449	0.0360	0.3421	8.6000e-004	0.0843	6.3000e-004	0.0849	0.0224	5.8000e-004	0.0230	0.0000	78.0560	78.0560	2.7000e-003	0.0000	78.1235
<b>Total</b>	<b>0.0649</b>	<b>0.5984</b>	<b>0.4670</b>	<b>2.1900e-003</b>	<b>0.1141</b>	<b>3.7400e-003</b>	<b>0.1178</b>	<b>0.0311</b>	<b>3.5500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>204.0002</b>	<b>204.0002</b>	<b>0.0129</b>	<b>0.0000</b>	<b>204.3230</b>

**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	0.0475	1.0029	1.2601	1.9000e-003		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003	0.0000	163.2848	163.2848	0.0398	0.0000	164.2807
<b>Total</b>	<b>0.0475</b>	<b>1.0029</b>	<b>1.2601</b>	<b>1.9000e-003</b>		<b>9.5600e-003</b>	<b>9.5600e-003</b>		<b>9.5600e-003</b>	<b>9.5600e-003</b>	<b>0.0000</b>	<b>163.2848</b>	<b>163.2848</b>	<b>0.0398</b>	<b>0.0000</b>	<b>164.2807</b>

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**3.4 Building Construction - 2020****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	0.0200	0.5624	0.1249	1.3300e-003	0.0298	3.1100e-003	0.0329	8.6400e-003	2.9700e-003	0.0116	0.0000	125.9442	125.9442	0.0102	0.0000	126.1995
Worker	0.0449	0.0360	0.3421	8.6000e-004	0.0843	6.3000e-004	0.0849	0.0224	5.8000e-004	0.0230	0.0000	78.0560	78.0560	2.7000e-003	0.0000	78.1235
<b>Total</b>	<b>0.0649</b>	<b>0.5984</b>	<b>0.4670</b>	<b>2.1900e-003</b>	<b>0.1141</b>	<b>3.7400e-003</b>	<b>0.1178</b>	<b>0.0311</b>	<b>3.5500e-003</b>	<b>0.0346</b>	<b>0.0000</b>	<b>204.0002</b>	<b>204.0002</b>	<b>0.0129</b>	<b>0.0000</b>	<b>204.3230</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0366	0.3798	0.3956	6.2000e-004		0.0203	0.0203		0.0187	0.0187	0.0000	54.0762	54.0762	0.0175	0.0000	54.5134
Paving	0.0335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0702</b>	<b>0.3798</b>	<b>0.3956</b>	<b>6.2000e-004</b>		<b>0.0203</b>	<b>0.0203</b>		<b>0.0187</b>	<b>0.0187</b>	<b>0.0000</b>	<b>54.0762</b>	<b>54.0762</b>	<b>0.0175</b>	<b>0.0000</b>	<b>54.5134</b>

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**3.5 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6800e-003	1.3500e-003	0.0128	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9308	2.9308	1.0000e-004	0.0000	2.9333
<b>Total</b>	<b>1.6800e-003</b>	<b>1.3500e-003</b>	<b>0.0128</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.9308</b>	<b>2.9308</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.9333</b>

**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	0.0152	0.3050	0.4670	6.2000e-004		2.4700e-003	2.4700e-003		2.4700e-003	2.4700e-003	0.0000	54.0761	54.0761	0.0175	0.0000	54.5134
Paving	0.0335					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0487</b>	<b>0.3050</b>	<b>0.4670</b>	<b>6.2000e-004</b>		<b>2.4700e-003</b>	<b>2.4700e-003</b>		<b>2.4700e-003</b>	<b>2.4700e-003</b>	<b>0.0000</b>	<b>54.0761</b>	<b>54.0761</b>	<b>0.0175</b>	<b>0.0000</b>	<b>54.5134</b>

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**3.5 Paving - 2020****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	1.6800e-003	1.3500e-003	0.0128	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.6000e-004	0.0000	2.9308	2.9308	1.0000e-004	0.0000	2.9333
<b>Total</b>	<b>1.6800e-003</b>	<b>1.3500e-003</b>	<b>0.0128</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>	<b>2.9308</b>	<b>2.9308</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>2.9333</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.1996					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.0842	0.0916	1.5000e-004		5.5500e-003	5.5500e-003		5.5500e-003	5.5500e-003	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910
<b>Total</b>	<b>2.2117</b>	<b>0.0842</b>	<b>0.0916</b>	<b>1.5000e-004</b>		<b>5.5500e-003</b>	<b>5.5500e-003</b>		<b>5.5500e-003</b>	<b>5.5500e-003</b>	<b>0.0000</b>	<b>12.7663</b>	<b>12.7663</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>12.7910</b>



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**3.6 Architectural Coating - 2020****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	6.4500e-003	5.1700e-003	0.0492	1.2000e-004	0.0121	9.0000e-005	0.0122	3.2200e-003	8.0000e-005	3.3100e-003	0.0000	11.2165	11.2165	3.9000e-004	0.0000	11.2262
<b>Total</b>	<b>6.4500e-003</b>	<b>5.1700e-003</b>	<b>0.0492</b>	<b>1.2000e-004</b>	<b>0.0121</b>	<b>9.0000e-005</b>	<b>0.0122</b>	<b>3.2200e-003</b>	<b>8.0000e-005</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>11.2165</b>	<b>11.2165</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>11.2262</b>

**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	2.1996					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9700e-003	0.0679	0.0916	1.5000e-004		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	12.7663	12.7663	9.9000e-004	0.0000	12.7910
<b>Total</b>	<b>2.2025</b>	<b>0.0679</b>	<b>0.0916</b>	<b>1.5000e-004</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>		<b>7.1000e-004</b>	<b>7.1000e-004</b>	<b>0.0000</b>	<b>12.7663</b>	<b>12.7663</b>	<b>9.9000e-004</b>	<b>0.0000</b>	<b>12.7910</b>

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**3.6 Architectural Coating - 2020****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	6.4500e-003	5.1700e-003	0.0492	1.2000e-004	0.0121	9.0000e-005	0.0122	3.2200e-003	8.0000e-005	3.3100e-003	0.0000	11.2165	11.2165	3.9000e-004	0.0000	11.2262
<b>Total</b>	<b>6.4500e-003</b>	<b>5.1700e-003</b>	<b>0.0492</b>	<b>1.2000e-004</b>	<b>0.0121</b>	<b>9.0000e-005</b>	<b>0.0122</b>	<b>3.2200e-003</b>	<b>8.0000e-005</b>	<b>3.3100e-003</b>	<b>0.0000</b>	<b>11.2165</b>	<b>11.2165</b>	<b>3.9000e-004</b>	<b>0.0000</b>	<b>11.2262</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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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					
Mitigated	1.6034	14.1663	18.6626	0.0922	6.5914	0.0714	6.6628	1.7730	0.0670	1.8400	0.0000	8,535.706 1	8,535.706 1	0.3696	0.0000	8,544.945 1
Unmitigated	1.6034	14.1663	18.6626	0.0922	6.5914	0.0714	6.6628	1.7730	0.0670	1.8400	0.0000	8,535.706 1	8,535.706 1	0.3696	0.0000	8,544.945 1

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

## 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
High Turnover (Sit Down)	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

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**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
High Turnover (Sit Down Restaurant)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Quality Restaurant	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**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	100.5390	100.5390	4.5500e-003	9.4000e-004	100.9329
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.5390	100.5390	4.5500e-003	9.4000e-004	100.9329
NaturalGas Mitigated	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1755	0.1755	0.0000	0.0000	0.1765
NaturalGas Unmitigated	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1755	0.1755	0.0000	0.0000	0.1765

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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					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	3288	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1755	0.1755	0.0000	0.0000	0.1765
<b>Total</b>		<b>2.0000e-005</b>	<b>1.6000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1755</b>	<b>0.1755</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1765</b>

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**5.2 Energy by Land Use - NaturalGas****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					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	3288	2.0000e-005	1.6000e-004	1.4000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1755	0.1755	0.0000	0.0000	0.1765
<b>Total</b>		<b>2.0000e-005</b>	<b>1.6000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1755</b>	<b>0.1755</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1765</b>

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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			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	345600	100.5390	4.5500e-003	9.4000e-004	100.9329
<b>Total</b>		<b>100.5390</b>	<b>4.5500e-003</b>	<b>9.4000e-004</b>	<b>100.9329</b>

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**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	345600	100.5390	4.5500e-003	9.4000e-004	100.9329
<b>Total</b>		<b>100.5390</b>	<b>4.5500e-003</b>	<b>9.4000e-004</b>	<b>100.9329</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.4517	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Unmitigated	1.4517	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003

## 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	0.2200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
<b>Total</b>	<b>1.4517</b>	<b>4.0000e-005</b>	<b>4.1800e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.1500e-003</b>	<b>8.1500e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.6800e-003</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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	0.2200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1800e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
<b>Total</b>	<b>1.4517</b>	<b>4.0000e-005</b>	<b>4.1800e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.1500e-003</b>	<b>8.1500e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.6800e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	45.8927	0.7637	0.0184	70.4535
Unmitigated	52.1508	0.8678	0.0209	80.0608

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	6.90872 / 0.483421	13.5592	0.2256	5.4200e-003	20.8158
Hotel	10.0383 / 0.702406	19.7014	0.3279	7.8800e-003	30.2452
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.45436 / 0.24171	6.7796	0.1128	2.7100e-003	10.4079
Regional Shopping Center	6.17061 / 0.431773	12.1106	0.2015	4.8400e-003	18.5919
<b>Total</b>		<b>52.1508</b>	<b>0.8678</b>	<b>0.0209</b>	<b>80.0608</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	6.07967 / 0.42541	11.9321	0.1986	4.7700e-003	18.3179
Hotel	8.83371 / 0.618117	17.3372	0.2885	6.9300e-003	26.6158
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.03984 / 0.212705	5.9661	0.0993	2.3900e-003	9.1590
Regional Shopping Center	5.43014 / 0.37996	10.6573	0.1774	4.2600e-003	16.3609
<b>Total</b>		<b>45.8927</b>	<b>0.7637</b>	<b>0.0184</b>	<b>70.4535</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.7350	1.3436	0.0000	56.3250
Unmitigated	22.7350	1.3436	0.0000	56.3250

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	112	22.7350	1.3436	0.0000	56.3250
<b>Total</b>		<b>22.7350</b>	<b>1.3436</b>	<b>0.0000</b>	<b>56.3250</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	112	22.7350	1.3436	0.0000	56.3250
<b>Total</b>		<b>22.7350</b>	<b>1.3436</b>	<b>0.0000</b>	<b>56.3250</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

User Defined Equipment

Equipment Type	Number
----------------	--------

## 10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0118	0.0526	0.2104	1.2900e-003		0.0163	0.0163		0.0163	0.0163	0.0000	233.7375	233.7375	4.4800e-003	0.0000	233.8495
Emergency Generator - Diesel (750 - 9999 HP)	0.0288	0.1287	0.0734	1.4000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	13.3568	13.3568	1.8700e-003	0.0000	13.4037
<b>Total</b>	<b>0.0406</b>	<b>0.1813</b>	<b>0.2838</b>	<b>1.4300e-003</b>		<b>0.0206</b>	<b>0.0206</b>		<b>0.0206</b>	<b>0.0206</b>	<b>0.0000</b>	<b>247.0943</b>	<b>247.0943</b>	<b>6.3500e-003</b>	<b>0.0000</b>	<b>247.2531</b>

## 11.0 Vegetation

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-176.7100	0.0000	0.0000	-176.7100

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 191	-176.7100	0.0000	0.0000	-176.7100
<b>Total</b>		<b>-176.7100</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-176.7100</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	NumDays	740.00	228.00
tblConstructionPhase	NumDays	75.00	22.00
tblConstructionPhase	NumDays	55.00	54.00
tblConstructionPhase	NumDays	30.00	23.00
tblConstructionPhase	PhaseEndDate	4/30/2021	7/31/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/15/2020
tblConstructionPhase	PhaseStartDate	9/30/2020	3/15/2020
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	7/16/2020	4/1/2020
tblEnergyUse	LightingElect	6.34	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	55.00	187.50
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8513	54.5914	34.2383	0.0639	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	6,323.873 8	6,323.873 8	1.9500	0.0000	6,372.624 7
2020	50.2307	43.3914	42.5049	0.0896	2.0753	2.0361	4.1113	0.5605	1.9063	2.4668	0.0000	8,810.852 9	8,810.852 9	1.5728	0.0000	8,850.173 6
Maximum	50.2307	54.5914	42.5049	0.0896	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	8,810.852 9	8,810.852 9	1.9500	0.0000	8,850.173 6

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.0204	41.4610	37.5510	0.0639	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	6,323.873 8	6,323.873 8	1.9500	0.0000	6,372.624 7
2020	47.8064	35.3342	46.1747	0.0896	2.0753	0.2965	2.3717	0.5605	0.2937	0.8541	0.0000	8,810.852 9	8,810.852 9	1.5728	0.0000	8,850.173 6
Maximum	47.8064	41.4610	46.1747	0.0896	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	8,810.852 9	8,810.852 9	1.9500	0.0000	8,850.173 6

	ROG	NOx	CO	SO2	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	7.73	21.62	-9.10	0.00	48.97	67.87	56.34	51.87	67.40	62.39	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
Mobile	11.0139	76.1740	118.1016	0.5409	38.0274	0.3921	38.4195	10.1861	0.3681	10.5542		55,104.4154	55,104.4154	2.2442		55,160.5211
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>21.4339</b>	<b>87.1889</b>	<b>125.4172</b>	<b>0.5595</b>	<b>38.0274</b>	<b>0.8345</b>	<b>38.8619</b>	<b>10.1861</b>	<b>0.8106</b>	<b>10.9967</b>		<b>57,744.3137</b>	<b>57,744.3137</b>	<b>2.4436</b>	<b>2.0000e-005</b>	<b>57,805.4092</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**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	lb/day										lb/day					
Area	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
Mobile	11.0139	76.1740	118.1016	0.5409	38.0274	0.3921	38.4195	10.1861	0.3681	10.5542		55,104.4154	55,104.4154	2.2442		55,160.5211
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>21.4339</b>	<b>87.1889</b>	<b>125.4172</b>	<b>0.5595</b>	<b>38.0274</b>	<b>0.8345</b>	<b>38.8619</b>	<b>10.1861</b>	<b>0.8106</b>	<b>10.9967</b>		<b>57,744.3137</b>	<b>57,744.3137</b>	<b>2.4436</b>	<b>2.0000e-005</b>	<b>57,805.4092</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/31/2019	5	23	
2	Grading	Grading	8/1/2019	8/31/2019	5	22	
3	Building Construction	Building Construction	9/1/2019	7/15/2020	5	228	
4	Paving	Paving	4/1/2020	6/15/2020	5	54	
5	Architectural Coating	Architectural Coating	3/15/2020	7/31/2020	5	100	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 187.5**

**Acres of Paving: 25.59**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 470,952; Non-Residential Outdoor: 156,984; Striped Parking Area: 4,800 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	153.00	65.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.0604	0.0000	15.0604	4.2862	0.0000	4.2862			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>15.0604</b>	<b>2.3827</b>	<b>17.4431</b>	<b>4.2862</b>	<b>2.1920</b>	<b>6.4782</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7772	0.0000	6.7772	1.9288	0.0000	1.9288			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>6.7772</b>	<b>1.1249</b>	<b>7.9021</b>	<b>1.9288</b>	<b>1.0439</b>	<b>2.9727</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3461	8.5896	1.8953	0.0192	0.4405	0.0683	0.5088	0.1268	0.0653	0.1922		2,010.279 5	2,010.279 5	0.1660		2,014.430 4
Worker	0.8601	0.5451	6.5909	0.0142	1.2569	9.2700e-003	1.2661	0.3334	8.5500e-003	0.3419		1,406.485 3	1,406.485 3	0.0566		1,407.900 8
<b>Total</b>	<b>1.2061</b>	<b>9.1347</b>	<b>8.4862</b>	<b>0.0334</b>	<b>1.6974</b>	<b>0.0775</b>	<b>1.7749</b>	<b>0.4602</b>	<b>0.0739</b>	<b>0.5341</b>		<b>3,416.764 8</b>	<b>3,416.764 8</b>	<b>0.2227</b>		<b>3,422.331 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3461	8.5896	1.8953	0.0192	0.4405	0.0683	0.5088	0.1268	0.0653	0.1922		2,010.279 5	2,010.279 5	0.1660		2,014.430 4
Worker	0.8601	0.5451	6.5909	0.0142	1.2569	9.2700e-003	1.2661	0.3334	8.5500e-003	0.3419		1,406.485 3	1,406.485 3	0.0566		1,407.900 8
<b>Total</b>	<b>1.2061</b>	<b>9.1347</b>	<b>8.4862</b>	<b>0.0334</b>	<b>1.6974</b>	<b>0.0775</b>	<b>1.7749</b>	<b>0.4602</b>	<b>0.0739</b>	<b>0.5341</b>		<b>3,416.764 8</b>	<b>3,416.764 8</b>	<b>0.2227</b>		<b>3,422.331 2</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2793	7.8370	1.6371	0.0191	0.4405	0.0437	0.4842	0.1268	0.0418	0.1686		1,996.8866	1,996.8866	0.1514		2,000.6712
Worker	0.7690	0.4758	5.7939	0.0137	1.2569	8.9400e-003	1.2658	0.3334	8.2500e-003	0.3416		1,362.1780	1,362.1780	0.0483		1,363.3846
<b>Total</b>	<b>1.0484</b>	<b>8.3129</b>	<b>7.4309</b>	<b>0.0328</b>	<b>1.6974</b>	<b>0.0526</b>	<b>1.7500</b>	<b>0.4602</b>	<b>0.0500</b>	<b>0.5102</b>		<b>3,359.0646</b>	<b>3,359.0646</b>	<b>0.1996</b>		<b>3,364.0557</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2793	7.8370	1.6371	0.0191	0.4405	0.0437	0.4842	0.1268	0.0418	0.1686		1,996.8866	1,996.8866	0.1514		2,000.6712
Worker	0.7690	0.4758	5.7939	0.0137	1.2569	8.9400e-003	1.2658	0.3334	8.2500e-003	0.3416		1,362.1780	1,362.1780	0.0483		1,363.3846
<b>Total</b>	<b>1.0484</b>	<b>8.3129</b>	<b>7.4309</b>	<b>0.0328</b>	<b>1.6974</b>	<b>0.0526</b>	<b>1.7500</b>	<b>0.4602</b>	<b>0.0500</b>	<b>0.5102</b>		<b>3,359.0646</b>	<b>3,359.0646</b>	<b>0.1996</b>		<b>3,364.0557</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	1.2416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5981</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	1.2416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8025</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.9910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>44.2332</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1558	0.0964	1.1739	2.7700e-003	0.2547	1.8100e-003	0.2565	0.0676	1.6700e-003	0.0692		275.9969	275.9969	9.7800e-003		276.2413
<b>Total</b>	<b>0.1558</b>	<b>0.0964</b>	<b>1.1739</b>	<b>2.7700e-003</b>	<b>0.2547</b>	<b>1.8100e-003</b>	<b>0.2565</b>	<b>0.0676</b>	<b>1.6700e-003</b>	<b>0.0692</b>		<b>275.9969</b>	<b>275.9969</b>	<b>9.7800e-003</b>		<b>276.2413</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.9910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>44.0504</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1558	0.0964	1.1739	2.7700e-003	0.2547	1.8100e-003	0.2565	0.0676	1.6700e-003	0.0692		275.9969	275.9969	9.7800e-003		276.2413
<b>Total</b>	<b>0.1558</b>	<b>0.0964</b>	<b>1.1739</b>	<b>2.7700e-003</b>	<b>0.2547</b>	<b>1.8100e-003</b>	<b>0.2565</b>	<b>0.0676</b>	<b>1.6700e-003</b>	<b>0.0692</b>		<b>275.9969</b>	<b>275.9969</b>	<b>9.7800e-003</b>		<b>276.2413</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.0139	76.1740	118.1016	0.5409	38.0274	0.3921	38.4195	10.1861	0.3681	10.5542		55,104.4154	55,104.4154	2.2442		55,160.5211
Unmitigated	11.0139	76.1740	118.1016	0.5409	38.0274	0.3921	38.4195	10.1861	0.3681	10.5542		55,104.4154	55,104.4154	2.2442		55,160.5211

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

## 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
High Turnover (Sit Down)	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
High Turnover (Sit Down Restaurant)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Quality Restaurant	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
NaturalGas Unmitigated	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	9.00822	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
<b>Total</b>		<b>1.0000e-004</b>	<b>8.8000e-004</b>	<b>7.4000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.0598</b>	<b>1.0598</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0661</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	0.00900822	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
<b>Total</b>		<b>1.0000e-004</b>	<b>8.8000e-004</b>	<b>7.4000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.0598</b>	<b>1.0598</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0661</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Unmitigated	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2800e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9568</b>	<b>4.2000e-004</b>	<b>0.0465</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2800e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9568</b>	<b>4.2000e-004</b>	<b>0.0465</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0647	0.2880	1.1530	7.0600e-003		0.0894	0.0894		0.0894	0.0894		1,411.7888	1,411.7888	0.0271		1,412.4653
Emergency Generator - Diesel (750 - 9999 HP)	2.3984	10.7256	6.1155	0.0115		0.3528	0.3528		0.3528	0.3528		1,226.9499	1,226.9499	0.1720		1,231.2504
<b>Total</b>	<b>2.4631</b>	<b>11.0136</b>	<b>7.2684</b>	<b>0.0186</b>		<b>0.4422</b>	<b>0.4422</b>		<b>0.4422</b>	<b>0.4422</b>		<b>2,638.7387</b>	<b>2,638.7387</b>	<b>0.1991</b>		<b>2,643.7157</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	NumDays	740.00	228.00
tblConstructionPhase	NumDays	75.00	22.00
tblConstructionPhase	NumDays	55.00	54.00
tblConstructionPhase	NumDays	30.00	23.00
tblConstructionPhase	PhaseEndDate	4/30/2021	7/31/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseEndDate	9/29/2020	6/15/2020
tblConstructionPhase	PhaseStartDate	9/30/2020	3/15/2020
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	7/16/2020	4/1/2020
tblEnergyUse	LightingElect	6.34	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	55.00	187.50
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17
tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.8373	54.6055	34.1073	0.0636	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	6,299.462 2	6,299.462 2	1.9491	0.0000	6,348.188 6
2020	50.1206	43.6573	41.6098	0.0866	2.0753	2.0371	4.1123	0.5605	1.9073	2.4677	0.0000	8,509.549 2	8,509.549 2	1.5835	0.0000	8,549.136 9
Maximum	50.1206	54.6055	41.6098	0.0866	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	8,509.549 2	8,509.549 2	1.9491	0.0000	8,549.136 9

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.0063	41.4750	37.4200	0.0636	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	6,299.462 2	6,299.462 2	1.9491	0.0000	6,348.188 6
2020	47.6963	35.6001	45.2796	0.0866	2.0753	0.2975	2.3727	0.5605	0.2946	0.8551	0.0000	8,509.549 2	8,509.549 2	1.5835	0.0000	8,549.136 8
Maximum	47.6963	41.4750	45.2796	0.0866	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	8,509.549 2	8,509.549 2	1.9491	0.0000	8,549.136 8

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	7.74	21.56	-9.22	0.00	48.97	67.85	56.33	51.87	67.38	62.38	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
Mobile	8.4625	78.8672	104.0548	0.4946	38.0274	0.3938	38.4212	10.1861	0.3698	10.5559		50,455.6161	50,455.6161	2.3355		50,514.0037
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>18.8825</b>	<b>89.8821</b>	<b>111.3704</b>	<b>0.5132</b>	<b>38.0274</b>	<b>0.8363</b>	<b>38.8637</b>	<b>10.1861</b>	<b>0.8122</b>	<b>10.9983</b>		<b>53,095.5144</b>	<b>53,095.5144</b>	<b>2.5349</b>	<b>2.0000e-005</b>	<b>53,158.8918</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**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	lb/day										lb/day					
Area	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
Mobile	8.4625	78.8672	104.0548	0.4946	38.0274	0.3938	38.4212	10.1861	0.3698	10.5559		50,455.6161	50,455.6161	2.3355		50,514.0037
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>18.8825</b>	<b>89.8821</b>	<b>111.3704</b>	<b>0.5132</b>	<b>38.0274</b>	<b>0.8363</b>	<b>38.8637</b>	<b>10.1861</b>	<b>0.8122</b>	<b>10.9983</b>		<b>53,095.5144</b>	<b>53,095.5144</b>	<b>2.5349</b>	<b>2.0000e-005</b>	<b>53,158.8918</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/31/2019	5	23	
2	Grading	Grading	8/1/2019	8/31/2019	5	22	
3	Building Construction	Building Construction	9/1/2019	7/15/2020	5	228	
4	Paving	Paving	4/1/2020	6/15/2020	5	54	
5	Architectural Coating	Architectural Coating	3/15/2020	7/31/2020	5	100	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 187.5**

**Acres of Paving: 25.59**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 470,952; Non-Residential Outdoor: 156,984; Striped Parking Area: 4,800 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	153.00	65.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.0604	0.0000	15.0604	4.2862	0.0000	4.2862			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>15.0604</b>	<b>2.3827</b>	<b>17.4431</b>	<b>4.2862</b>	<b>2.1920</b>	<b>6.4782</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7772	0.0000	6.7772	1.9288	0.0000	1.9288			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>6.7772</b>	<b>1.1249</b>	<b>7.9021</b>	<b>1.9288</b>	<b>1.0439</b>	<b>2.9727</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3612	8.7782	2.2270	0.0186	0.4405	0.0696	0.5101	0.1268	0.0666	0.1934		1,944.785 3	1,944.785 3	0.1866		1,949.450 9
Worker	0.7525	0.6525	5.5887	0.0123	1.2569	9.2700e-003	1.2661	0.3334	8.5500e-003	0.3419		1,219.736 8	1,219.736 8	0.0491		1,220.964 5
<b>Total</b>	<b>1.1136</b>	<b>9.4306</b>	<b>7.8156</b>	<b>0.0309</b>	<b>1.6974</b>	<b>0.0789</b>	<b>1.7763</b>	<b>0.4602</b>	<b>0.0751</b>	<b>0.5354</b>		<b>3,164.522 1</b>	<b>3,164.522 1</b>	<b>0.2357</b>		<b>3,170.415 4</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3612	8.7782	2.2270	0.0186	0.4405	0.0696	0.5101	0.1268	0.0666	0.1934		1,944.785 3	1,944.785 3	0.1866		1,949.450 9
Worker	0.7525	0.6525	5.5887	0.0123	1.2569	9.2700e-003	1.2661	0.3334	8.5500e-003	0.3419		1,219.736 8	1,219.736 8	0.0491		1,220.964 5
<b>Total</b>	<b>1.1136</b>	<b>9.4306</b>	<b>7.8156</b>	<b>0.0309</b>	<b>1.6974</b>	<b>0.0789</b>	<b>1.7763</b>	<b>0.4602</b>	<b>0.0751</b>	<b>0.5354</b>		<b>3,164.522 1</b>	<b>3,164.522 1</b>	<b>0.2357</b>		<b>3,170.415 4</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2932	7.9823	1.9415	0.0185	0.4405	0.0447	0.4852	0.1268	0.0427	0.1696		1,931.030 1	1,931.030 1	0.1709		1,935.301 4
Worker	0.6737	0.5686	4.8716	0.0119	1.2569	8.9400e-003	1.2658	0.3334	8.2500e-003	0.3416		1,181.155 9	1,181.155 9	0.0415		1,182.193 4
<b>Total</b>	<b>0.9669</b>	<b>8.5509</b>	<b>6.8131</b>	<b>0.0304</b>	<b>1.6974</b>	<b>0.0536</b>	<b>1.7510</b>	<b>0.4602</b>	<b>0.0510</b>	<b>0.5112</b>		<b>3,112.185 9</b>	<b>3,112.185 9</b>	<b>0.2124</b>		<b>3,117.494 8</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2932	7.9823	1.9415	0.0185	0.4405	0.0447	0.4852	0.1268	0.0427	0.1696		1,931.030 1	1,931.030 1	0.1709		1,935.301 4
Worker	0.6737	0.5686	4.8716	0.0119	1.2569	8.9400e-003	1.2658	0.3334	8.2500e-003	0.3416		1,181.155 9	1,181.155 9	0.0415		1,182.193 4
<b>Total</b>	<b>0.9669</b>	<b>8.5509</b>	<b>6.8131</b>	<b>0.0304</b>	<b>1.6974</b>	<b>0.0536</b>	<b>1.7510</b>	<b>0.4602</b>	<b>0.0510</b>	<b>0.5112</b>		<b>3,112.185 9</b>	<b>3,112.185 9</b>	<b>0.2124</b>		<b>3,117.494 8</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	1.2416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.5981</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	1.2416					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.8025</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.9910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>44.2332</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1365	0.1152	0.9871	2.4100e-003	0.2547	1.8100e-003	0.2565	0.0676	1.6700e-003	0.0692		239.3192	239.3192	8.4100e-003		239.5294
<b>Total</b>	<b>0.1365</b>	<b>0.1152</b>	<b>0.9871</b>	<b>2.4100e-003</b>	<b>0.2547</b>	<b>1.8100e-003</b>	<b>0.2565</b>	<b>0.0676</b>	<b>1.6700e-003</b>	<b>0.0692</b>		<b>239.3192</b>	<b>239.3192</b>	<b>8.4100e-003</b>		<b>239.5294</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.9910					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>44.0504</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1365	0.1152	0.9871	2.4100e-003	0.2547	1.8100e-003	0.2565	0.0676	1.6700e-003	0.0692		239.3192	239.3192	8.4100e-003		239.5294
<b>Total</b>	<b>0.1365</b>	<b>0.1152</b>	<b>0.9871</b>	<b>2.4100e-003</b>	<b>0.2547</b>	<b>1.8100e-003</b>	<b>0.2565</b>	<b>0.0676</b>	<b>1.6700e-003</b>	<b>0.0692</b>		<b>239.3192</b>	<b>239.3192</b>	<b>8.4100e-003</b>		<b>239.5294</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4625	78.8672	104.0548	0.4946	38.0274	0.3938	38.4212	10.1861	0.3698	10.5559		50,455.61 61	50,455.61 61	2.3355		50,514.00 37
Unmitigated	8.4625	78.8672	104.0548	0.4946	38.0274	0.3938	38.4212	10.1861	0.3698	10.5559		50,455.61 61	50,455.61 61	2.3355		50,514.00 37

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

## 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
High Turnover (Sit Down)	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
High Turnover (Sit Down Restaurant)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Quality Restaurant	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
NaturalGas Unmitigated	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	9.00822	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
<b>Total</b>		<b>1.0000e-004</b>	<b>8.8000e-004</b>	<b>7.4000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.0598</b>	<b>1.0598</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0661</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	0.00900822	1.0000e-004	8.8000e-004	7.4000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.0598	1.0598	2.0000e-005	2.0000e-005	1.0661
<b>Total</b>		<b>1.0000e-004</b>	<b>8.8000e-004</b>	<b>7.4000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.0598</b>	<b>1.0598</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0661</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
Unmitigated	7.9568	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2800e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9568</b>	<b>4.2000e-004</b>	<b>0.0465</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2800e-003	4.2000e-004	0.0465	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9568</b>	<b>4.2000e-004</b>	<b>0.0465</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0647	0.2880	1.1530	7.0600e-003		0.0894	0.0894		0.0894	0.0894		1,411.7888	1,411.7888	0.0271		1,412.4653
Emergency Generator - Diesel (750 - 9999 HP)	2.3984	10.7256	6.1155	0.0115		0.3528	0.3528		0.3528	0.3528		1,226.9499	1,226.9499	0.1720		1,231.2504
<b>Total</b>	<b>2.4631</b>	<b>11.0136</b>	<b>7.2684</b>	<b>0.0186</b>		<b>0.4422</b>	<b>0.4422</b>		<b>0.4422</b>	<b>0.4422</b>		<b>2,638.7387</b>	<b>2,638.7387</b>	<b>0.1991</b>		<b>2,643.7157</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.18	0.00	0.00	0.86	0.86	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.48	0.20	-0.04	0.00	0.84	0.83	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.38	0.24	-0.10	0.00	0.53	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.30	0.20	-0.17	0.00	0.88	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	2	2	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	2	2	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	9	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	1.21100E-002	8.41900E-002	9.15700E-002	1.50000E-004	5.55000E-003	5.55000E-003	0.00000E+000	1.27663E+001	1.27663E+001	9.90000E-004	0.00000E+000	1.27910E+001
Cranes	4.71500E-002	5.61230E-001	2.17770E-001	5.80000E-004	2.34000E-002	2.15300E-002	0.00000E+000	5.09947E+001	5.09947E+001	1.63500E-002	0.00000E+000	5.14036E+001
Excavators	5.74000E-003	5.90000E-002	7.17900E-002	1.10000E-004	2.85000E-003	2.62000E-003	0.00000E+000	1.02011E+001	1.02011E+001	3.23000E-003	0.00000E+000	1.02818E+001
Forklifts	5.13300E-002	4.60820E-001	4.05470E-001	5.20000E-004	3.48800E-002	3.20900E-002	0.00000E+000	4.63171E+001	4.63171E+001	1.48500E-002	0.00000E+000	4.66884E+001
Generator Sets	4.74500E-002	4.09580E-001	4.23200E-001	7.50000E-004	2.36600E-002	2.36600E-002	0.00000E+000	6.44337E+001	6.44337E+001	3.80000E-003	0.00000E+000	6.45287E+001
Graders	5.35000E-003	7.23800E-002	2.02200E-002	7.00000E-005	2.32000E-003	2.14000E-003	0.00000E+000	6.56248E+000	6.56248E+000	2.08000E-003	0.00000E+000	6.61439E+000
Pavers	1.41800E-002	1.51760E-001	1.56510E-001	2.50000E-004	7.38000E-003	6.79000E-003	0.00000E+000	2.23029E+001	2.23029E+001	7.21000E-003	0.00000E+000	2.24832E+001
Paving Equipment	1.12000E-002	1.15630E-001	1.36860E-001	2.20000E-004	5.78000E-003	5.32000E-003	0.00000E+000	1.93271E+001	1.93271E+001	6.25000E-003	0.00000E+000	1.94834E+001
Rollers	1.12400E-002	1.12380E-001	1.02240E-001	1.40000E-004	7.16000E-003	6.59000E-003	0.00000E+000	1.24462E+001	1.24462E+001	4.03000E-003	0.00000E+000	1.25468E+001
Rubber Tired Dozers	5.16200E-002	5.49390E-001	1.94930E-001	3.90000E-004	2.67900E-002	2.46400E-002	0.00000E+000	3.48967E+001	3.48967E+001	1.10400E-002	0.00000E+000	3.51727E+001
Scrapers	2.34400E-002	2.84100E-001	1.77350E-001	3.30000E-004	1.11300E-002	1.02400E-002	0.00000E+000	2.99334E+001	2.99334E+001	9.47000E-003	0.00000E+000	3.01702E+001
Tractors/Loaders/ Backhoes	8.11900E-002	8.15420E-001	8.41410E-001	1.14000E-003	5.30600E-002	4.88200E-002	0.00000E+000	1.01325E+002	1.01325E+002	3.24100E-002	0.00000E+000	1.02135E+002
Welders	4.08700E-002	1.81430E-001	2.03190E-001	2.90000E-004	1.04600E-002	1.04600E-002	0.00000E+000	2.14572E+001	2.14572E+001	3.33000E-003	0.00000E+000	2.15404E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.97000E-003	6.78500E-002	9.16200E-002	1.50000E-004	7.10000E-004	7.10000E-004	0.00000E+000	1.27663E+001	1.27663E+001	9.90000E-004	0.00000E+000	1.27910E+001
Cranes	1.41400E-002	2.73420E-001	3.06420E-001	5.80000E-004	1.56000E-003	1.56000E-003	0.00000E+000	5.09946E+001	5.09946E+001	1.63500E-002	0.00000E+000	5.14035E+001
Excavators	2.80000E-003	5.40500E-002	8.62000E-002	1.10000E-004	3.90000E-004	3.90000E-004	0.00000E+000	1.02011E+001	1.02011E+001	3.23000E-003	0.00000E+000	1.02818E+001
Forklifts	1.28800E-002	2.94180E-001	3.97260E-001	5.20000E-004	3.09000E-003	3.09000E-003	0.00000E+000	4.63170E+001	4.63170E+001	1.48500E-002	0.00000E+000	4.66884E+001
Generator Sets	1.50000E-002	3.42440E-001	4.62430E-001	7.50000E-004	3.60000E-003	3.60000E-003	0.00000E+000	6.44336E+001	6.44336E+001	3.80000E-003	0.00000E+000	6.45286E+001
Graders	1.78000E-003	3.45100E-002	3.86700E-002	7.00000E-005	2.00000E-004	2.00000E-004	0.00000E+000	6.56247E+000	6.56247E+000	2.08000E-003	0.00000E+000	6.61438E+000
Pavers	6.24000E-003	1.20640E-001	1.92400E-001	2.50000E-004	8.70000E-004	8.70000E-004	0.00000E+000	2.23028E+001	2.23028E+001	7.21000E-003	0.00000E+000	2.24832E+001
Paving Equipment	5.43000E-003	1.05000E-001	1.67450E-001	2.20000E-004	7.60000E-004	7.60000E-004	0.00000E+000	1.93271E+001	1.93271E+001	6.25000E-003	0.00000E+000	1.94834E+001
Rollers	3.47000E-003	7.93300E-002	1.07130E-001	1.40000E-004	8.30000E-004	8.30000E-004	0.00000E+000	1.24462E+001	1.24462E+001	4.03000E-003	0.00000E+000	1.25468E+001
Rubber Tired Dozers	9.51000E-003	1.83940E-001	2.06140E-001	3.90000E-004	1.05000E-003	1.05000E-003	0.00000E+000	3.48966E+001	3.48966E+001	1.10400E-002	0.00000E+000	3.51727E+001
Scrapers	2.34400E-002	2.84100E-001	1.77350E-001	3.30000E-004	1.11300E-002	1.02400E-002	0.00000E+000	2.99334E+001	2.99334E+001	9.47000E-003	0.00000E+000	3.01701E+001
Tractors/Loaders/Balckhoes	2.79000E-002	6.36960E-001	8.60120E-001	1.14000E-003	6.70000E-003	6.70000E-003	0.00000E+000	1.01324E+002	1.01324E+002	3.24100E-002	0.00000E+000	1.02135E+002
Welders	1.20700E-002	1.92700E-001	1.70640E-001	2.90000E-004	1.75000E-003	1.75000E-003	0.00000E+000	2.14571E+001	2.14571E+001	3.33000E-003	0.00000E+000	2.15404E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.54748E-001	1.94085E-001	-5.46030E-004	0.00000E+000	8.72072E-001	8.72072E-001	0.00000E+000	1.56663E-006	1.56663E-006	0.00000E+000	0.00000E+000	1.56360E-006
Cranes	7.00106E-001	5.12820E-001	-4.07081E-001	0.00000E+000	9.33333E-001	9.27543E-001	0.00000E+000	1.17659E-006	1.17659E-006	0.00000E+000	0.00000E+000	1.16723E-006
Excavators	5.12195E-001	8.38983E-002	-2.00724E-001	0.00000E+000	8.63158E-001	8.51145E-001	0.00000E+000	1.96058E-006	1.96058E-006	0.00000E+000	0.00000E+000	9.72596E-007
Forklifts	7.49075E-001	3.61616E-001	2.02481E-002	0.00000E+000	9.11411E-001	9.03708E-001	0.00000E+000	1.07952E-006	1.07952E-006	0.00000E+000	0.00000E+000	1.07093E-006
Generator Sets	6.83878E-001	1.63924E-001	-9.26985E-002	0.00000E+000	8.47844E-001	8.47844E-001	0.00000E+000	1.24159E-006	1.24159E-006	0.00000E+000	0.00000E+000	1.23976E-006
Graders	6.67290E-001	5.23211E-001	-9.12463E-001	0.00000E+000	9.13793E-001	9.06542E-001	0.00000E+000	1.52381E-006	1.52381E-006	0.00000E+000	0.00000E+000	1.51186E-006
Pavers	5.59944E-001	2.05061E-001	-2.29314E-001	0.00000E+000	8.82114E-001	8.71870E-001	0.00000E+000	1.34512E-006	1.34512E-006	0.00000E+000	0.00000E+000	1.33433E-006
Paving Equipment	5.15179E-001	9.19312E-002	-2.23513E-001	0.00000E+000	8.68512E-001	8.57143E-001	0.00000E+000	1.55222E-006	1.55222E-006	0.00000E+000	0.00000E+000	1.53977E-006
Rollers	6.91281E-001	2.94091E-001	-4.78286E-002	0.00000E+000	8.84078E-001	8.74052E-001	0.00000E+000	8.03458E-007	8.03458E-007	0.00000E+000	0.00000E+000	7.97014E-007
Rubber Tired Dozers	8.15769E-001	6.65192E-001	-5.75078E-002	0.00000E+000	9.60806E-001	9.57386E-001	0.00000E+000	1.14624E-006	1.14624E-006	0.00000E+000	0.00000E+000	1.42156E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.00223E-006	1.00223E-006	0.00000E+000	0.00000E+000	1.32581E-006
Tractors/Loaders/Balckhoes	6.56362E-001	2.18857E-001	-2.22365E-002	0.00000E+000	8.73728E-001	8.62761E-001	0.00000E+000	1.18431E-006	1.18431E-006	0.00000E+000	0.00000E+000	1.17492E-006
Welders	7.04673E-001	-6.21176E-002	1.60195E-001	0.00000E+000	8.32696E-001	8.32696E-001	0.00000E+000	9.32090E-007	9.32090E-007	0.00000E+000	0.00000E+000	9.28488E-007

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.18	0.05	0.18	0.05	0.00	0.00
Grading	Fugitive Dust	0.17	0.05	0.07	0.02	0.55	0.55
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.21	0.11	0.09	0.05	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary



Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	12.00	12.00	12.00	12.00	11.99	12.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.21	0.50		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	30.00	2.00
tblConstructionPhase	PhaseEndDate	7/31/2019	7/2/2019
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31
tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00
tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00
tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

**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					
2019	-0.0007	8.1700e-003	0.0241	4.0000e-005	8.2700e-003	-0.0011	7.1600e-003	4.5100e-003	-0.0010	3.5100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	-0.0007	8.1700e-003	0.0241	4.0000e-005	8.2700e-003	-0.0011	7.1600e-003	4.5100e-003	-0.0010	3.5100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

	ROG	NOx	CO	SO2	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	115.61	82.10	-5.85	0.00	54.59	146.44	65.24	54.76	145.45	71.16	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.0358	0.0054
		Highest	0.0358	0.0054

## 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	1.4517	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Energy	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	100.7311	100.7311	4.5500e-003	9.4000e-004	101.1262
Mobile	0.8389	11.3534	9.7431	0.0805	6.5872	0.0305	6.6177	1.7702	0.0286	1.7987	0.0000	7,487.4640	7,487.4640	0.3456	0.0000	7,496.1046
Stationary	0.0406	0.1813	0.2838	1.4300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	247.0943	247.0943	6.3500e-003	0.0000	247.2531
Waste						0.0000	0.0000		0.0000	0.0000	22.7350	0.0000	22.7350	1.3436	0.0000	56.3250
Water						0.0000	0.0000		0.0000	0.0000	8.4301	43.7207	52.1508	0.8678	0.0209	80.0608
<b>Total</b>	<b>2.3312</b>	<b>11.5349</b>	<b>10.0312</b>	<b>0.0819</b>	<b>6.5872</b>	<b>0.0510</b>	<b>6.6382</b>	<b>1.7702</b>	<b>0.0491</b>	<b>1.8193</b>	<b>31.1651</b>	<b>7,879.0183</b>	<b>7,910.1834</b>	<b>2.5680</b>	<b>0.0218</b>	<b>7,980.8784</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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	1.4517	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Energy	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	100.7311	100.7311	4.5500e-003	9.4000e-004	101.1262
Mobile	0.8389	11.3534	9.7431	0.0805	6.5872	0.0305	6.6177	1.7702	0.0286	1.7987	0.0000	7,487.4640	7,487.4640	0.3456	0.0000	7,496.1046
Stationary	0.0406	0.1813	0.2838	1.4300e-003		0.0206	0.0206		0.0206	0.0206	0.0000	247.0943	247.0943	6.3500e-003	0.0000	247.2531
Waste						0.0000	0.0000		0.0000	0.0000	22.7350	0.0000	22.7350	1.3436	0.0000	56.3250
Water						0.0000	0.0000		0.0000	0.0000	7.4185	38.4742	45.8927	0.7637	0.0184	70.4535
<b>Total</b>	<b>2.3312</b>	<b>11.5349</b>	<b>10.0312</b>	<b>0.0819</b>	<b>6.5872</b>	<b>0.0510</b>	<b>6.6382</b>	<b>1.7702</b>	<b>0.0491</b>	<b>1.8193</b>	<b>30.1535</b>	<b>7,873.7718</b>	<b>7,903.9253</b>	<b>2.4638</b>	<b>0.0193</b>	<b>7,971.2711</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.25</b>	<b>0.07</b>	<b>0.08</b>	<b>4.06</b>	<b>11.47</b>	<b>0.12</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-176.7100
<b>Total</b>	<b>-176.7100</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 25.59****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

**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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**3.2 Site Preparation - 2019****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					8.1300e-003	0.0000	8.1300e-003	4.4700e-003	0.0000	4.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	-0.0008	8.1000e-003	0.0234	4.0000e-005		-0.0011	-0.0011		-0.0010	-0.0010	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>-0.0008</b>	<b>8.1000e-003</b>	<b>0.0234</b>	<b>4.0000e-005</b>	<b>8.1300e-003</b>	<b>-0.0011</b>	<b>7.0200e-003</b>	<b>4.4700e-003</b>	<b>-0.0010</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

**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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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	0.8389	11.3534	9.7431	0.0805	6.5872	0.0305	6.6177	1.7702	0.0286	1.7987	0.0000	7,487.4640	7,487.4640	0.3456	0.0000	7,496.1046
Unmitigated	0.8389	11.3534	9.7431	0.0805	6.5872	0.0305	6.6177	1.7702	0.0286	1.7987	0.0000	7,487.4640	7,487.4640	0.3456	0.0000	7,496.1046

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

**4.3 Trip Type Information**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
High Turnover (Sit Down Restaurant)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Quality Restaurant	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	100.5390	100.5390	4.5500e-003	9.4000e-004	100.9329
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.5390	100.5390	4.5500e-003	9.4000e-004	100.9329
NaturalGas Mitigated	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1921	0.1921	0.0000	0.0000	0.1933
NaturalGas Unmitigated	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1921	0.1921	0.0000	0.0000	0.1933

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	3600	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1921	0.1921	0.0000	0.0000	0.1933
<b>Total</b>		<b>2.0000e-005</b>	<b>1.8000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1921</b>	<b>0.1921</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1933</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	3600	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1921	0.1921	0.0000	0.0000	0.1933
<b>Total</b>		<b>2.0000e-005</b>	<b>1.8000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1921</b>	<b>0.1921</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1933</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	345600	100.5390	4.5500e-003	9.4000e-004	100.9329
<b>Total</b>		<b>100.5390</b>	<b>4.5500e-003</b>	<b>9.4000e-004</b>	<b>100.9329</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	345600	100.5390	4.5500e-003	9.4000e-004	100.9329
<b>Total</b>		<b>100.5390</b>	<b>4.5500e-003</b>	<b>9.4000e-004</b>	<b>100.9329</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	1.4517	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
Unmitigated	1.4517	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003

## 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	0.2200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
<b>Total</b>	<b>1.4517</b>	<b>4.0000e-005</b>	<b>4.1600e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.1500e-003</b>	<b>8.1500e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.6800e-003</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**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	0.2200					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2314					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.1600e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	8.1500e-003	8.1500e-003	2.0000e-005	0.0000	8.6800e-003
<b>Total</b>	<b>1.4517</b>	<b>4.0000e-005</b>	<b>4.1600e-003</b>	<b>0.0000</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>		<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>8.1500e-003</b>	<b>8.1500e-003</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>8.6800e-003</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	45.8927	0.7637	0.0184	70.4535
Unmitigated	52.1508	0.8678	0.0209	80.0608

## 7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	6.90872 / 0.483421	13.5592	0.2256	5.4200e-003	20.8158
Hotel	10.0383 / 0.702406	19.7014	0.3279	7.8800e-003	30.2452
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.45436 / 0.24171	6.7796	0.1128	2.7100e-003	10.4079
Regional Shopping Center	6.17061 / 0.431773	12.1106	0.2015	4.8400e-003	18.5919
<b>Total</b>		<b>52.1508</b>	<b>0.8678</b>	<b>0.0209</b>	<b>80.0608</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
High Turnover (Sit Down Restaurant)	6.07967 / 0.42541	11.9321	0.1986	4.7700e-003	18.3179
Hotel	8.83371 / 0.618117	17.3372	0.2885	6.9300e-003	26.6158
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	3.03984 / 0.212705	5.9661	0.0993	2.3900e-003	9.1590
Regional Shopping Center	5.43014 / 0.37996	10.6573	0.1774	4.2600e-003	16.3609
<b>Total</b>		<b>45.8927</b>	<b>0.7637</b>	<b>0.0184</b>	<b>70.4535</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.7350	1.3436	0.0000	56.3250
Unmitigated	22.7350	1.3436	0.0000	56.3250

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	112	22.7350	1.3436	0.0000	56.3250
<b>Total</b>		<b>22.7350</b>	<b>1.3436</b>	<b>0.0000</b>	<b>56.3250</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
High Turnover (Sit Down Restaurant)	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	112	22.7350	1.3436	0.0000	56.3250
<b>Total</b>		<b>22.7350</b>	<b>1.3436</b>	<b>0.0000</b>	<b>56.3250</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

User Defined Equipment

Equipment Type	Number
----------------	--------

## 10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0118	0.0526	0.2104	1.2900e-003		0.0163	0.0163		0.0163	0.0163	0.0000	233.7375	233.7375	4.4800e-003	0.0000	233.8495
Emergency Generator - Diesel (750 - 9999 HP)	0.0288	0.1287	0.0734	1.4000e-004		4.2300e-003	4.2300e-003		4.2300e-003	4.2300e-003	0.0000	13.3568	13.3568	1.8700e-003	0.0000	13.4037
<b>Total</b>	<b>0.0406</b>	<b>0.1813</b>	<b>0.2838</b>	<b>1.4300e-003</b>		<b>0.0206</b>	<b>0.0206</b>		<b>0.0206</b>	<b>0.0206</b>	<b>0.0000</b>	<b>247.0943</b>	<b>247.0943</b>	<b>6.3500e-003</b>	<b>0.0000</b>	<b>247.2531</b>

## 11.0 Vegetation



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-176.7100	0.0000	0.0000	-176.7100

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	232 / 191	-176.7100	0.0000	0.0000	-176.7100
<b>Total</b>		<b>-176.7100</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-176.7100</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	30.00	2.00
tblConstructionPhase	PhaseEndDate	7/31/2019	7/2/2019
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31
tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00
tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00
tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	8.1635	24.1764	0.0397	8.2777	-1.1061	7.1716	4.5080	-0.9972	3.5109	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	0.0000	8.1635	24.1764	0.0397	8.2777	-1.1061	7.1716	4.5080	-0.9972	3.5109	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

	ROG	NOx	CO	SO2	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	100.00	82.11	-5.86	0.00	54.55	146.25	65.20	54.78	145.32	71.15	0.00	0.00	0.00	0.00	0.00	0.00



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
Mobile	5.5233	61.8022	61.7303	0.4683	38.0043	0.1672	38.1715	10.1706	0.1569	10.3274		47,980.3039	47,980.3039	2.0261		48,030.9574
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>15.9433</b>	<b>72.8171</b>	<b>69.0458</b>	<b>0.4869</b>	<b>38.0043</b>	<b>0.6096</b>	<b>38.6139</b>	<b>10.1706</b>	<b>0.5993</b>	<b>10.7699</b>		<b>50,620.3028</b>	<b>50,620.3028</b>	<b>2.2255</b>	<b>2.0000e-005</b>	<b>50,675.9465</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**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	lb/day										lb/day					
Area	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
Mobile	5.5233	61.8022	61.7303	0.4683	38.0043	0.1672	38.1715	10.1706	0.1569	10.3274		47,980.3039	47,980.3039	2.0261		48,030.9574
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>15.9433</b>	<b>72.8171</b>	<b>69.0458</b>	<b>0.4869</b>	<b>38.0043</b>	<b>0.6096</b>	<b>38.6139</b>	<b>10.1706</b>	<b>0.5993</b>	<b>10.7699</b>		<b>50,620.3028</b>	<b>50,620.3028</b>	<b>2.2255</b>	<b>2.0000e-005</b>	<b>50,675.9465</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**Acres of Paving: 25.59****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	-0.7693	8.0993	23.4010	0.0380		-1.1072	-1.1072		-0.9982	-0.9982	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>-0.7693</b>	<b>8.0993</b>	<b>23.4010</b>	<b>0.0380</b>	<b>8.1298</b>	<b>-1.1072</b>	<b>7.0226</b>	<b>4.4688</b>	<b>-0.9982</b>	<b>3.4707</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5233	61.8022	61.7303	0.4683	38.0043	0.1672	38.1715	10.1706	0.1569	10.3274		47,980.30 39	47,980.30 39	2.0261		48,030.95 74
Unmitigated	5.5233	61.8022	61.7303	0.4683	38.0043	0.1672	38.1715	10.1706	0.1569	10.3274		47,980.30 39	47,980.30 39	2.0261		48,030.95 74

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

**4.3 Trip Type Information**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

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
High Turnover (Sit Down	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
High Turnover (Sit Down Restaurant)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Quality Restaurant	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
NaturalGas Unmitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673

## 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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	9.86301	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.1604</b>	<b>1.1604</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1673</b>



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	0.00986301	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.1604</b>	<b>1.1604</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1673</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Unmitigated	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2300e-003	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9567</b>	<b>4.2000e-004</b>	<b>0.0463</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2300e-003	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9567</b>	<b>4.2000e-004</b>	<b>0.0463</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Summer

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0647	0.2880	1.1530	7.0600e-003		0.0894	0.0894		0.0894	0.0894		1,411.7888	1,411.7888	0.0271		1,412.4653
Emergency Generator - Diesel (750 - 9999 HP)	2.3984	10.7256	6.1155	0.0115		0.3528	0.3528		0.3528	0.3528		1,226.9499	1,226.9499	0.1720		1,231.2504
<b>Total</b>	<b>2.4631</b>	<b>11.0136</b>	<b>7.2684</b>	<b>0.0186</b>		<b>0.4422</b>	<b>0.4422</b>		<b>0.4422</b>	<b>0.4422</b>		<b>2,638.7387</b>	<b>2,638.7387</b>	<b>0.1991</b>		<b>2,643.7157</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	200.00	Space	25.59	80,000.00	0
High Turnover (Sit Down Restaurant)	4.87	1000sqft	0.31	4,867.00	0
Hotel	128.00	Room	6.83	185,856.00	0
Quality Restaurant	3.25	1000sqft	0.21	3,245.00	0
Regional Shopping Center	120.00	1000sqft	7.69	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

Project Characteristics - project description

Land Use - Refer to CalEEMod tables

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Operational Off-Road Equipment - N/A

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	30.00	2.00
tblConstructionPhase	PhaseEndDate	7/31/2019	7/2/2019
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	6.34	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	16.25	0.00
tblEnergyUse	NT24E	2.30	2.88
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	174.70	0.00
tblEnergyUse	NT24NG	2.08	0.03
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	6.86	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	18.08	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblEnergyUse	T24NG	35.90	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	4,870.00	4,867.00
tblLandUse	BuildingSpaceSquareFeet	3,250.00	3,245.00
tblLandUse	LandUseSquareFeet	4,870.00	4,867.00
tblLandUse	LandUseSquareFeet	3,250.00	3,245.00
tblLandUse	LotAcreage	1.80	25.59
tblLandUse	LotAcreage	0.11	0.31
tblLandUse	LotAcreage	4.27	6.83
tblLandUse	LotAcreage	0.07	0.21
tblLandUse	LotAcreage	2.75	7.69
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	57.95	0.00
tblSolidWaste	SolidWasteGenerationRate	70.08	0.00
tblSolidWaste	SolidWasteGenerationRate	2.97	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	112.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	1.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	12.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	DV_TP	20.00	15.00
tblVehicleTrips	DV_TP	38.00	15.00
tblVehicleTrips	DV_TP	0.00	15.00
tblVehicleTrips	DV_TP	18.00	15.00
tblVehicleTrips	DV_TP	35.00	15.00
tblVehicleTrips	PB_TP	43.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	44.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	37.00	85.00
tblVehicleTrips	PR_TP	58.00	85.00
tblVehicleTrips	PR_TP	0.00	85.00
tblVehicleTrips	PR_TP	38.00	85.00
tblVehicleTrips	PR_TP	54.00	85.00
tblVehicleTrips	ST_TR	158.37	98.21
tblVehicleTrips	ST_TR	8.19	8.17
tblVehicleTrips	ST_TR	94.36	58.24
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	SU_TR	131.84	98.21
tblVehicleTrips	SU_TR	5.95	8.17

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

tblVehicleTrips	SU_TR	72.16	58.24
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	WD_TR	127.15	98.21
tblVehicleTrips	WD_TR	89.95	58.24
tblVehicleTrips	WD_TR	42.70	22.52
tblWater	IndoorWaterUseRate	1,478,209.18	6,908,720.00
tblWater	IndoorWaterUseRate	3,246,946.56	10,038,311.00
tblWater	IndoorWaterUseRate	986,484.57	3,454,360.00
tblWater	IndoorWaterUseRate	8,888,702.58	6,170,609.00
tblWater	OutdoorWaterUseRate	94,353.78	483,421.00
tblWater	OutdoorWaterUseRate	360,771.84	702,406.00
tblWater	OutdoorWaterUseRate	62,967.10	241,710.00
tblWater	OutdoorWaterUseRate	5,447,914.48	431,773.00

## 2.0 Emissions Summary

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## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	8.1761	24.0585	0.0394	8.2777	-1.1061	7.1716	4.5080	-0.9972	3.5109	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	0.0000	8.1761	24.0585	0.0394	8.2777	-1.1061	7.1716	4.5080	-0.9972	3.5109	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	100.00	82.09	-5.89	0.00	54.55	146.25	65.20	54.78	145.32	71.15	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
Mobile	4.4586	62.4624	54.1361	0.4317	38.0043	0.1679	38.1722	10.1706	0.1576	10.3281		44,284.4953	44,284.4953	2.2260		44,340.1462
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>14.8786</b>	<b>73.4774</b>	<b>61.4516</b>	<b>0.4502</b>	<b>38.0043</b>	<b>0.6104</b>	<b>38.6147</b>	<b>10.1706</b>	<b>0.6000</b>	<b>10.7706</b>		<b>46,924.4941</b>	<b>46,924.4941</b>	<b>2.4254</b>	<b>2.0000e-005</b>	<b>46,985.1353</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**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	lb/day										lb/day					
Area	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Energy	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
Mobile	4.4586	62.4624	54.1361	0.4317	38.0043	0.1679	38.1722	10.1706	0.1576	10.3281		44,284.4953	44,284.4953	2.2260		44,340.1462
Stationary	2.4631	11.0136	7.2684	0.0186		0.4422	0.4422		0.4422	0.4422		2,638.7387	2,638.7387	0.1991		2,643.7157
<b>Total</b>	<b>14.8786</b>	<b>73.4774</b>	<b>61.4516</b>	<b>0.4502</b>	<b>38.0043</b>	<b>0.6104</b>	<b>38.6147</b>	<b>10.1706</b>	<b>0.6000</b>	<b>10.7706</b>		<b>46,924.4941</b>	<b>46,924.4941</b>	<b>2.4254</b>	<b>2.0000e-005</b>	<b>46,985.1353</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**Acres of Paving: 25.59****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	-0.7693	8.0993	23.4010	0.0380		-1.1072	-1.1072		-0.9982	-0.9982	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>-0.7693</b>	<b>8.0993</b>	<b>23.4010</b>	<b>0.0380</b>	<b>8.1298</b>	<b>-1.1072</b>	<b>7.0226</b>	<b>4.4688</b>	<b>-0.9982</b>	<b>3.4707</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**4.0 Operational Detail - Mobile**



## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4586	62.4624	54.1361	0.4317	38.0043	0.1679	38.1722	10.1706	0.1576	10.3281		44,284.49 53	44,284.49 53	2.2260		44,340.14 62
Unmitigated	4.4586	62.4624	54.1361	0.4317	38.0043	0.1679	38.1722	10.1706	0.1576	10.3281		44,284.49 53	44,284.49 53	2.2260		44,340.14 62

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
High Turnover (Sit Down Restaurant)	478.28	478.28	478.28	1,922,867	1,922,867
Hotel	1,045.76	1,045.76	1,045.76	4,204,329	4,204,329
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	189.28	189.28	189.28	760,973	760,973
Regional Shopping Center	2,702.40	2,702.40	2,702.40	10,864,613	10,864,613
Total	4,415.72	4,415.72	4,415.72	17,752,783	17,752,783

**4.3 Trip Type Information**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
High Turnover (Sit Down	9.50	9.50	25.00	8.50	72.50	19.00	85	15	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	85	15	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	85	15	0
Quality Restaurant	9.50	9.50	25.00	12.00	69.00	19.00	85	15	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	85	15	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
High Turnover (Sit Down Restaurant)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Quality Restaurant	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
NaturalGas Unmitigated	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673

## 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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	9.86301	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.1604</b>	<b>1.1604</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1673</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
High Turnover (Sit Down Restaurant)	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
Hotel	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Quality Restaurant	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
Regional Shopping Center	0.00986301	1.1000e-004	9.7000e-004	8.1000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005		1.1604	1.1604	2.0000e-005	2.0000e-005	1.1673
<b>Total</b>		<b>1.1000e-004</b>	<b>9.7000e-004</b>	<b>8.1000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>1.1604</b>	<b>1.1604</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.1673</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
Unmitigated	7.9567	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2300e-003	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9567</b>	<b>4.2000e-004</b>	<b>0.0463</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.2052					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.7473					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.2300e-003	4.2000e-004	0.0463	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0998	0.0998	2.6000e-004		0.1063
<b>Total</b>	<b>7.9567</b>	<b>4.2000e-004</b>	<b>0.0463</b>	<b>0.0000</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>1.6000e-004</b>	<b>1.6000e-004</b>		<b>0.0998</b>	<b>0.0998</b>	<b>2.6000e-004</b>		<b>0.1063</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D - Shasta County, Winter

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.5	12	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	1	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.0647	0.2880	1.1530	7.0600e-003		0.0894	0.0894		0.0894	0.0894		1,411.7888	1,411.7888	0.0271		1,412.4653
Emergency Generator - Diesel (750 - 9999 HP)	2.3984	10.7256	6.1155	0.0115		0.3528	0.3528		0.3528	0.3528		1,226.9499	1,226.9499	0.1720		1,231.2504
<b>Total</b>	<b>2.4631</b>	<b>11.0136</b>	<b>7.2684</b>	<b>0.0186</b>		<b>0.4422</b>	<b>0.4422</b>		<b>0.4422</b>	<b>0.4422</b>		<b>2,638.7387</b>	<b>2,638.7387</b>	<b>0.1991</b>		<b>2,643.7157</b>

**11.0 Vegetation**

## Redding Rancheria Fee-to-Trust and Casino Project – Alternative D

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	1.16	0.82	-0.06	0.00	1.46	1.45	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Dozers	Diesel	Tier 3	4	3	Level 3	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	4	Level 3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12482E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Rubber Tired Dozers	-2.90000E-004	4.18000E-003	1.38400E-002	3.00000E-005	-4.90000E-004	-4.40000E-004	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	-4.80000E-004	3.92000E-003	9.57000E-003	1.00000E-005	-6.20000E-004	-5.50000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12481E+000



Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	1.08529E+000	8.84594E-001	-7.70428E-002	0.00000E+000	1.27684E+000	1.27160E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	1.51613E+000	5.80749E-001	-3.90879E-002	0.00000E+000	2.00000E+000	1.96491E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.89031E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.02	0.01	0.01	0.00	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	12.00	12.00	12.00	12.00	11.99	12.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.21	0.50		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00

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tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00

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tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00

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tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00
tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00

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tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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					
2019	0.3165	3.3223	2.0528	4.2500e-003	0.8681	0.1479	1.0160	0.3696	0.1364	0.5060	0.0000	384.5372	384.5372	0.0946	0.0000	386.9015
2020	4.6049	6.1247	5.6018	0.0165	0.6722	0.1992	0.8713	0.1824	0.1876	0.3700	0.0000	1,502.9738	1,502.9738	0.1648	0.0000	1,507.0939
Maximum	4.6049	6.1247	5.6018	0.0165	0.8681	0.1992	1.0160	0.3696	0.1876	0.5060	0.0000	1,502.9738	1,502.9738	0.1648	0.0000	1,507.0939

**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					
2019	0.1619	2.2238	2.1884	4.2500e-003	0.4239	0.0437	0.4677	0.1754	0.0410	0.2163	0.0000	384.5369	384.5369	0.0946	0.0000	386.9012
2020	4.3748	5.3652	5.8305	0.0165	0.6722	0.0413	0.7134	0.1824	0.0403	0.2227	0.0000	1,502.9733	1,502.9733	0.1648	0.0000	1,507.0935
Maximum	4.3748	5.3652	5.8305	0.0165	0.6722	0.0437	0.7134	0.1824	0.0410	0.2227	0.0000	1,502.9733	1,502.9733	0.1648	0.0000	1,507.0935

	ROG	NOx	CO	SO2	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	7.82	19.67	-4.76	0.00	28.84	75.52	37.42	35.19	74.92	49.88	0.00	0.00	0.00	0.00	0.00	0.00



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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.7456	0.9230
2	10-1-2019	12-31-2019	1.8842	1.4637
3	1-1-2020	3-31-2020	1.8031	1.5918
4	4-1-2020	6-30-2020	3.2061	2.9036
5	7-1-2020	9-30-2020	3.1425	2.8567
		Highest	3.2061	2.9036

## 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	2.4924	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Energy	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	594.9094	594.9094	0.0269	5.5700e-003	597.2425
Mobile	4.1156	36.4797	52.6678	0.2648	19.5278	0.2078	19.7356	5.2526	0.1951	5.4478	0.0000	24,493.8559	24,493.8559	0.9246	0.0000	24,516.9717
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	261.4524	0.0000	261.4524	15.4514	0.0000	647.7372
Water						0.0000	0.0000		0.0000	0.0000	23.5996	120.9262	144.5258	2.4294	0.0584	222.6527
<b>Total</b>	<b>6.6867</b>	<b>36.8319</b>	<b>53.4657</b>	<b>0.2689</b>	<b>19.5278</b>	<b>0.2634</b>	<b>19.7912</b>	<b>5.2526</b>	<b>0.2507</b>	<b>5.5034</b>	<b>285.0519</b>	<b>25,931.0478</b>	<b>26,216.0997</b>	<b>18.8488</b>	<b>0.0639</b>	<b>26,706.3737</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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	2.4924	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Energy	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	594.9094	594.9094	0.0269	5.5700e-003	597.2425
Mobile	4.1156	36.4797	52.6678	0.2648	19.5278	0.2078	19.7356	5.2526	0.1951	5.4478	0.0000	24,493.8559	24,493.8559	0.9246	0.0000	24,516.9717
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	261.4524	0.0000	261.4524	15.4514	0.0000	647.7372
Water						0.0000	0.0000		0.0000	0.0000	16.6141	85.8065	102.4206	1.7103	0.0411	157.4246
<b>Total</b>	<b>6.6867</b>	<b>36.8319</b>	<b>53.4657</b>	<b>0.2689</b>	<b>19.5278</b>	<b>0.2634</b>	<b>19.7912</b>	<b>5.2526</b>	<b>0.2507</b>	<b>5.5034</b>	<b>278.0665</b>	<b>25,895.9281</b>	<b>26,173.9945</b>	<b>18.1297</b>	<b>0.0467</b>	<b>26,641.1456</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.45</b>	<b>0.14</b>	<b>0.16</b>	<b>3.81</b>	<b>27.00</b>	<b>0.24</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-129.3000
<b>Total</b>	<b>-129.3000</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 387.5****Acres of Paving: 77.49**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 794,660; Non-Residential Outdoor: 264,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	456.00	182.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	91.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4065	0.0000	0.4065	0.2234	0.0000	0.2234	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0975	1.0254	0.4964	8.5000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0975</b>	<b>1.0254</b>	<b>0.4964</b>	<b>8.5000e-004</b>	<b>0.4065</b>	<b>0.0538</b>	<b>0.4603</b>	<b>0.2234</b>	<b>0.0495</b>	<b>0.2729</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**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					0.1829	0.0000	0.1829	0.1006	0.0000	0.1006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0210	0.4290	0.5166	8.5000e-004		3.1900e-003	3.1900e-003		3.1900e-003	3.1900e-003	0.0000	76.8795	76.8795	0.0243	0.0000	77.4876
<b>Total</b>	<b>0.0210</b>	<b>0.4290</b>	<b>0.5166</b>	<b>8.5000e-004</b>	<b>0.1829</b>	<b>3.1900e-003</b>	<b>0.1861</b>	<b>0.1006</b>	<b>3.1900e-003</b>	<b>0.1037</b>	<b>0.0000</b>	<b>76.8795</b>	<b>76.8795</b>	<b>0.0243</b>	<b>0.0000</b>	<b>77.4876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.2 Site Preparation - 2019****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	1.8800e-003	1.5500e-003	0.0147	3.0000e-005	3.1600e-003	2.0000e-005	3.1900e-003	8.4000e-004	2.0000e-005	8.7000e-004	0.0000	3.0264	3.0264	1.2000e-004	0.0000	3.0294
<b>Total</b>	<b>1.8800e-003</b>	<b>1.5500e-003</b>	<b>0.0147</b>	<b>3.0000e-005</b>	<b>3.1600e-003</b>	<b>2.0000e-005</b>	<b>3.1900e-003</b>	<b>8.4000e-004</b>	<b>2.0000e-005</b>	<b>8.7000e-004</b>	<b>0.0000</b>	<b>3.0264</b>	<b>3.0264</b>	<b>1.2000e-004</b>	<b>0.0000</b>	<b>3.0294</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4012	0.0000	0.4012	0.1298	0.0000	0.1298	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1540	1.7719	1.0847	2.0200e-003		0.0774	0.0774		0.0712	0.0712	0.0000	181.0293	181.0293	0.0573	0.0000	182.4612
<b>Total</b>	<b>0.1540</b>	<b>1.7719</b>	<b>1.0847</b>	<b>2.0200e-003</b>	<b>0.4012</b>	<b>0.0774</b>	<b>0.4786</b>	<b>0.1298</b>	<b>0.0712</b>	<b>0.2010</b>	<b>0.0000</b>	<b>181.0293</b>	<b>181.0293</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4612</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**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					0.1805	0.0000	0.1805	0.0584	0.0000	0.0584	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0945	1.3452	1.1924	2.0200e-003		0.0366	0.0366		0.0339	0.0339	0.0000	181.0291	181.0291	0.0573	0.0000	182.4610
<b>Total</b>	<b>0.0945</b>	<b>1.3452</b>	<b>1.1924</b>	<b>2.0200e-003</b>	<b>0.1805</b>	<b>0.0366</b>	<b>0.2171</b>	<b>0.0584</b>	<b>0.0339</b>	<b>0.0923</b>	<b>0.0000</b>	<b>181.0291</b>	<b>181.0291</b>	<b>0.0573</b>	<b>0.0000</b>	<b>182.4610</b>



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**3.3 Grading - 2019****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	3.0200e-003	2.4900e-003	0.0236	5.0000e-005	5.0800e-003	4.0000e-005	5.1200e-003	1.3500e-003	4.0000e-005	1.3900e-003	0.0000	4.8572	4.8572	1.9000e-004	0.0000	4.8620
<b>Total</b>	<b>3.0200e-003</b>	<b>2.4900e-003</b>	<b>0.0236</b>	<b>5.0000e-005</b>	<b>5.0800e-003</b>	<b>4.0000e-005</b>	<b>5.1200e-003</b>	<b>1.3500e-003</b>	<b>4.0000e-005</b>	<b>1.3900e-003</b>	<b>0.0000</b>	<b>4.8572</b>	<b>4.8572</b>	<b>1.9000e-004</b>	<b>0.0000</b>	<b>4.8620</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2319	0.1888	3.0000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	25.8615	25.8615	6.3000e-003	0.0000	26.0190
<b>Total</b>	<b>0.0260</b>	<b>0.2319</b>	<b>0.1888</b>	<b>3.0000e-004</b>		<b>0.0142</b>	<b>0.0142</b>		<b>0.0133</b>	<b>0.0133</b>	<b>0.0000</b>	<b>25.8615</b>	<b>25.8615</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0190</b>

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**3.4 Building Construction - 2019****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	0.0108	0.2699	0.0629	5.8000e-004	0.0130	2.1200e-003	0.0152	3.7700e-003	2.0300e-003	5.8000e-003	0.0000	55.4009	55.4009	4.8800e-003	0.0000	55.5230
Worker	0.0233	0.0192	0.1817	4.2000e-004	0.0392	3.0000e-004	0.0395	0.0104	2.8000e-004	0.0107	0.0000	37.4825	37.4825	1.4800e-003	0.0000	37.5194
<b>Total</b>	<b>0.0341</b>	<b>0.2891</b>	<b>0.2446</b>	<b>1.0000e-003</b>	<b>0.0522</b>	<b>2.4200e-003</b>	<b>0.0547</b>	<b>0.0142</b>	<b>2.3100e-003</b>	<b>0.0165</b>	<b>0.0000</b>	<b>92.8834</b>	<b>92.8834</b>	<b>6.3600e-003</b>	<b>0.0000</b>	<b>93.0424</b>

**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	7.4100e-003	0.1565	0.1966	3.0000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	25.8614	25.8614	6.3000e-003	0.0000	26.0189
<b>Total</b>	<b>7.4100e-003</b>	<b>0.1565</b>	<b>0.1966</b>	<b>3.0000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>25.8614</b>	<b>25.8614</b>	<b>6.3000e-003</b>	<b>0.0000</b>	<b>26.0189</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.4 Building Construction - 2019****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	0.0108	0.2699	0.0629	5.8000e-004	0.0130	2.1200e-003	0.0152	3.7700e-003	2.0300e-003	5.8000e-003	0.0000	55.4009	55.4009	4.8800e-003	0.0000	55.5230
Worker	0.0233	0.0192	0.1817	4.2000e-004	0.0392	3.0000e-004	0.0395	0.0104	2.8000e-004	0.0107	0.0000	37.4825	37.4825	1.4800e-003	0.0000	37.5194
<b>Total</b>	<b>0.0341</b>	<b>0.2891</b>	<b>0.2446</b>	<b>1.0000e-003</b>	<b>0.0522</b>	<b>2.4200e-003</b>	<b>0.0547</b>	<b>0.0142</b>	<b>2.3100e-003</b>	<b>0.0165</b>	<b>0.0000</b>	<b>92.8834</b>	<b>92.8834</b>	<b>6.3600e-003</b>	<b>0.0000</b>	<b>93.0424</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2650	2.3983	2.1061	3.3600e-003		0.1396	0.1396		0.1313	0.1313	0.0000	289.5125	289.5125	0.0706	0.0000	291.2783
<b>Total</b>	<b>0.2650</b>	<b>2.3983</b>	<b>2.1061</b>	<b>3.3600e-003</b>		<b>0.1396</b>	<b>0.1396</b>		<b>0.1313</b>	<b>0.1313</b>	<b>0.0000</b>	<b>289.5125</b>	<b>289.5125</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2783</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0992	2.7921	0.6202	6.5900e-003	0.1480	0.0154	0.1634	0.0429	0.0148	0.0576	0.0000	625.2550	625.2550	0.0507	0.0000	626.5224
Worker	0.2371	0.1902	1.8077	4.5700e-003	0.4454	3.3300e-003	0.4487	0.1186	3.0700e-003	0.1217	0.0000	412.4778	412.4778	0.0143	0.0000	412.8346
<b>Total</b>	<b>0.3363</b>	<b>2.9823</b>	<b>2.4279</b>	<b>0.0112</b>	<b>0.5934</b>	<b>0.0188</b>	<b>0.6122</b>	<b>0.1615</b>	<b>0.0178</b>	<b>0.1793</b>	<b>0.0000</b>	<b>1,037.7328</b>	<b>1,037.7328</b>	<b>0.0650</b>	<b>0.0000</b>	<b>1,039.3570</b>

**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	0.0842	1.7783	2.2342	3.3600e-003		0.0169	0.0169		0.0169	0.0169	0.0000	289.5121	289.5121	0.0706	0.0000	291.2779
<b>Total</b>	<b>0.0842</b>	<b>1.7783</b>	<b>2.2342</b>	<b>3.3600e-003</b>		<b>0.0169</b>	<b>0.0169</b>		<b>0.0169</b>	<b>0.0169</b>	<b>0.0000</b>	<b>289.5121</b>	<b>289.5121</b>	<b>0.0706</b>	<b>0.0000</b>	<b>291.2779</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.4 Building Construction - 2020****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	0.0992	2.7921	0.6202	6.5900e-003	0.1480	0.0154	0.1634	0.0429	0.0148	0.0576	0.0000	625.2550	625.2550	0.0507	0.0000	626.5224
Worker	0.2371	0.1902	1.8077	4.5700e-003	0.4454	3.3300e-003	0.4487	0.1186	3.0700e-003	0.1217	0.0000	412.4778	412.4778	0.0143	0.0000	412.8346
<b>Total</b>	<b>0.3363</b>	<b>2.9823</b>	<b>2.4279</b>	<b>0.0112</b>	<b>0.5934</b>	<b>0.0188</b>	<b>0.6122</b>	<b>0.1615</b>	<b>0.0178</b>	<b>0.1793</b>	<b>0.0000</b>	<b>1,037.7328</b>	<b>1,037.7328</b>	<b>0.0650</b>	<b>0.0000</b>	<b>1,039.3570</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0516	0.5345	0.5568	8.7000e-004		0.0286	0.0286		0.0263	0.0263	0.0000	76.1072	76.1072	0.0246	0.0000	76.7226
Paving	0.0799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1314</b>	<b>0.5345</b>	<b>0.5568</b>	<b>8.7000e-004</b>		<b>0.0286</b>	<b>0.0286</b>		<b>0.0263</b>	<b>0.0263</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7226</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**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	0.0213	0.4292	0.6572	8.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	76.1072	76.1072	0.0246	0.0000	76.7225
Paving	0.0799					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.1012</b>	<b>0.4292</b>	<b>0.6572</b>	<b>8.7000e-004</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>		<b>3.4700e-003</b>	<b>3.4700e-003</b>	<b>0.0000</b>	<b>76.1072</b>	<b>76.1072</b>	<b>0.0246</b>	<b>0.0000</b>	<b>76.7225</b>

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**3.5 Paving - 2020****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	2.3700e-003	1.9000e-003	0.0181	5.0000e-005	4.4500e-003	3.0000e-005	4.4900e-003	1.1900e-003	3.0000e-005	1.2200e-003	0.0000	4.1248	4.1248	1.4000e-004	0.0000	4.1284
<b>Total</b>	<b>2.3700e-003</b>	<b>1.9000e-003</b>	<b>0.0181</b>	<b>5.0000e-005</b>	<b>4.4500e-003</b>	<b>3.0000e-005</b>	<b>4.4900e-003</b>	<b>1.1900e-003</b>	<b>3.0000e-005</b>	<b>1.2200e-003</b>	<b>0.0000</b>	<b>4.1248</b>	<b>4.1248</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>4.1284</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.8050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0253	0.1760	0.1914	3.1000e-004		0.0116	0.0116		0.0116	0.0116	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7332
<b>Total</b>	<b>3.8303</b>	<b>0.1760</b>	<b>0.1914</b>	<b>3.1000e-004</b>		<b>0.0116</b>	<b>0.0116</b>		<b>0.0116</b>	<b>0.0116</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7332</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.6 Architectural Coating - 2020****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	0.0396	0.0317	0.3016	7.6000e-004	0.0743	5.6000e-004	0.0749	0.0198	5.1000e-004	0.0203	0.0000	68.8150	68.8150	2.3800e-003	0.0000	68.8746
<b>Total</b>	<b>0.0396</b>	<b>0.0317</b>	<b>0.3016</b>	<b>7.6000e-004</b>	<b>0.0743</b>	<b>5.6000e-004</b>	<b>0.0749</b>	<b>0.0198</b>	<b>5.1000e-004</b>	<b>0.0203</b>	<b>0.0000</b>	<b>68.8150</b>	<b>68.8150</b>	<b>2.3800e-003</b>	<b>0.0000</b>	<b>68.8746</b>

**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	3.8050					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2100e-003	0.1418	0.1915	3.1000e-004		1.4900e-003	1.4900e-003		1.4900e-003	1.4900e-003	0.0000	26.6815	26.6815	2.0700e-003	0.0000	26.7331
<b>Total</b>	<b>3.8112</b>	<b>0.1418</b>	<b>0.1915</b>	<b>3.1000e-004</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>		<b>1.4900e-003</b>	<b>1.4900e-003</b>	<b>0.0000</b>	<b>26.6815</b>	<b>26.6815</b>	<b>2.0700e-003</b>	<b>0.0000</b>	<b>26.7331</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**3.6 Architectural Coating - 2020****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	0.0396	0.0317	0.3016	7.6000e-004	0.0743	5.6000e-004	0.0749	0.0198	5.1000e-004	0.0203	0.0000	68.8150	68.8150	2.3800e-003	0.0000	68.8746
<b>Total</b>	<b>0.0396</b>	<b>0.0317</b>	<b>0.3016</b>	<b>7.6000e-004</b>	<b>0.0743</b>	<b>5.6000e-004</b>	<b>0.0749</b>	<b>0.0198</b>	<b>5.1000e-004</b>	<b>0.0203</b>	<b>0.0000</b>	<b>68.8150</b>	<b>68.8150</b>	<b>2.3800e-003</b>	<b>0.0000</b>	<b>68.8746</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	4.1156	36.4797	52.6678	0.2648	19.5278	0.2078	19.7356	5.2526	0.1951	5.4478	0.0000	24,493.85 59	24,493.85 59	0.9246	0.0000	24,516.97 17
Unmitigated	4.1156	36.4797	52.6678	0.2648	19.5278	0.2078	19.7356	5.2526	0.1951	5.4478	0.0000	24,493.85 59	24,493.85 59	0.9246	0.0000	24,516.97 17

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	593.8746	593.8746	0.0269	5.5600e-003	596.2015
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	593.8746	593.8746	0.0269	5.5600e-003	596.2015
NaturalGas Mitigated	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
NaturalGas Unmitigated	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19392.1	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
<b>Total</b>		<b>1.0000e-004</b>	<b>9.5000e-004</b>	<b>8.0000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0348</b>	<b>1.0348</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0410</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19392.1	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
<b>Total</b>		<b>1.0000e-004</b>	<b>9.5000e-004</b>	<b>8.0000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0348</b>	<b>1.0348</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0410</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.04143e+006	593.8746	0.0269	5.5600e-003	596.2015
<b>Total</b>		<b>593.8746</b>	<b>0.0269</b>	<b>5.5600e-003</b>	<b>596.2015</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.04143e+006	593.8746	0.0269	5.5600e-003	596.2015
<b>Total</b>		<b>593.8746</b>	<b>0.0269</b>	<b>5.5600e-003</b>	<b>596.2015</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	2.4924	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Unmitigated	2.4924	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157

## 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	0.3805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1300e-003	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
<b>Total</b>	<b>2.4924</b>	<b>5.0000e-004</b>	<b>0.0557</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1087</b>	<b>0.1087</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1157</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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	0.3805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1300e-003	5.0000e-004	0.0557	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
<b>Total</b>	<b>2.4924</b>	<b>5.0000e-004</b>	<b>0.0557</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1087</b>	<b>0.1087</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1157</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	102.4206	1.7103	0.0411	157.4246
Unmitigated	144.5258	2.4294	0.0584	222.6527

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.55131 / 0.230268	8.8427	0.1486	3.5700e-003	13.6228
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	16.6392 / 0.841839	32.3281	0.5434	0.0131	49.8039
Movie Theater (No Matinee)	10.9623 / 0.554623	21.2985	0.3580	8.6000e-003	32.8120
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.2282 / 0.517483	19.8723	0.3340	8.0300e-003	30.6148
User Defined Recreational	32.006 / 1.6193	62.1841	1.0453	0.0251	95.7993
<b>Total</b>		<b>144.5257</b>	<b>2.4294</b>	<b>0.0584</b>	<b>222.6527</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.20412 / 0.202636	6.2665	0.1046	2.5100e-003	9.6319
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	11.714 / 0.740818	22.9099	0.3826	9.1900e-003	35.2134
Movie Theater (No Matinee)	7.71746 / 0.488068	15.0936	0.2521	6.0600e-003	23.1994
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.20066 / 0.455385	14.0828	0.2352	5.6500e-003	21.6459
User Defined Recreational	22.5322 / 1.42499	44.0678	0.7359	0.0177	67.7340
<b>Total</b>		<b>102.4206</b>	<b>1.7103</b>	<b>0.0411</b>	<b>157.4246</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	261.4524	15.4514	0.0000	647.7372
Unmitigated	261.4524	15.4514	0.0000	647.7372

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1288	261.4524	15.4514	0.0000	647.7372
<b>Total</b>		<b>261.4524</b>	<b>15.4514</b>	<b>0.0000</b>	<b>647.7372</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1288	261.4524	15.4514	0.0000	647.7372
<b>Total</b>		<b>261.4524</b>	<b>15.4514</b>	<b>0.0000</b>	<b>647.7372</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0354	0.1577	0.6313	3.8600e-003		0.0490	0.0490		0.0490	0.0490	0.0000	701.2124	701.2124	0.0134	0.0000	701.5484
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0786</b>	<b>0.3507</b>	<b>0.7413</b>	<b>4.0700e-003</b>		<b>0.0553</b>	<b>0.0553</b>		<b>0.0553</b>	<b>0.0553</b>	<b>0.0000</b>	<b>721.2477</b>	<b>721.2477</b>	<b>0.0163</b>	<b>0.0000</b>	<b>721.6539</b>

**11.0 Vegetation**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-129.3000	0.0000	0.0000	-129.3000

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	55 / 25	-129.3000	0.0000	0.0000	-129.3000
<b>Total</b>		<b>-129.3000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-129.3000</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2025
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00
tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.8935	54.5914	42.1140	0.1229	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	12,412.24 05	12,412.24 05	1.9500	0.0000	12,443.86 50
2020	45.8388	58.6270	59.1979	0.1565	5.8501	2.1358	7.9860	1.5797	2.0010	3.5808	0.0000	15,637.08 29	15,637.08 29	1.9598	0.0000	15,686.07 85
Maximum	45.8388	58.6270	59.1979	0.1565	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	15,637.08 29	15,637.08 29	1.9598	0.0000	15,686.07 85

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.2062	41.4610	42.8240	0.1229	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	12,412.24 05	12,412.24 05	1.9500	0.0000	12,443.86 50
2020	43.4145	50.5698	62.8677	0.1565	5.8501	0.3963	6.2464	1.5797	0.3884	1.9681	0.0000	15,637.08 29	15,637.08 29	1.9598	0.0000	15,686.07 84
Maximum	43.4145	50.5698	62.8677	0.1565	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	15,637.08 29	15,637.08 29	1.9598	0.0000	15,686.07 84

	ROG	NOx	CO	SO2	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	7.95	18.71	-4.32	0.00	41.29	66.37	48.70	47.29	65.88	57.98	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	27.6084	195.1298	338.1336	1.5536	112.6602	1.1415	113.8017	30.1774	1.0719	31.2494		158,176.9955	158,176.9955	5.6849		158,319.1175
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>48.6841</b>	<b>228.1814</b>	<b>360.5625</b>	<b>1.6095</b>	<b>112.6602</b>	<b>2.4708</b>	<b>115.1310</b>	<b>30.1774</b>	<b>2.4012</b>	<b>32.5787</b>		<b>166,100.7929</b>	<b>166,100.7929</b>	<b>6.2857</b>	<b>1.1000e-004</b>	<b>166,257.9693</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**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	lb/day										lb/day					
Area	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	27.6084	195.1298	338.1336	1.5536	112.6602	1.1415	113.8017	30.1774	1.0719	31.2494		158,176.9955	158,176.9955	5.6849		158,319.1175
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>48.6841</b>	<b>228.1814</b>	<b>360.5625</b>	<b>1.6095</b>	<b>112.6602</b>	<b>2.4708</b>	<b>115.1310</b>	<b>30.1774</b>	<b>2.4012</b>	<b>32.5787</b>		<b>166,100.7929</b>	<b>166,100.7929</b>	<b>6.2857</b>	<b>1.1000e-004</b>	<b>166,257.9693</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 77.49**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 794,660; Non-Residential Outdoor: 264,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	456.00	182.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	91.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.3443	0.0000	12.3443	3.9929	0.0000	3.9929			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>12.3443</b>	<b>2.3827</b>	<b>14.7270</b>	<b>3.9929</b>	<b>2.1920</b>	<b>6.1849</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5549	0.0000	5.5549	1.7968	0.0000	1.7968			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>5.5549</b>	<b>1.1249</b>	<b>6.6798</b>	<b>1.7968</b>	<b>1.0439</b>	<b>2.8407</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9690	24.0508	5.3068	0.0539	1.2334	0.1912	1.4246	0.3552	0.1829	0.5380		5,628.782 6	5,628.782 6	0.4649		5,640.405 1
Worker	2.5634	1.6245	19.6435	0.0422	3.7459	0.0276	3.7736	0.9936	0.0255	1.0191		4,191.877 8	4,191.877 8	0.1687		4,196.096 4
<b>Total</b>	<b>3.5323</b>	<b>25.6753</b>	<b>24.9503</b>	<b>0.0960</b>	<b>4.9794</b>	<b>0.2188</b>	<b>5.1982</b>	<b>1.3488</b>	<b>0.2084</b>	<b>1.5571</b>		<b>9,820.660 3</b>	<b>9,820.660 3</b>	<b>0.6336</b>		<b>9,836.501 5</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9690	24.0508	5.3068	0.0539	1.2334	0.1912	1.4246	0.3552	0.1829	0.5380		5,628.782 6	5,628.782 6	0.4649		5,640.405 1
Worker	2.5634	1.6245	19.6435	0.0422	3.7459	0.0276	3.7736	0.9936	0.0255	1.0191		4,191.877 8	4,191.877 8	0.1687		4,196.096 4
<b>Total</b>	<b>3.5323</b>	<b>25.6753</b>	<b>24.9503</b>	<b>0.0960</b>	<b>4.9794</b>	<b>0.2188</b>	<b>5.1982</b>	<b>1.3488</b>	<b>0.2084</b>	<b>1.5571</b>		<b>9,820.660 3</b>	<b>9,820.660 3</b>	<b>0.6336</b>		<b>9,836.501 5</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7821	21.9437	4.5838	0.0535	1.2334	0.1222	1.3557	0.3552	0.1169	0.4721		5,591.2825	5,591.2825	0.4239		5,601.8793
Worker	2.2921	1.4182	17.2680	0.0408	3.7459	0.0267	3.7726	0.9936	0.0246	1.0182		4,059.8247	4,059.8247	0.1438		4,063.4207
<b>Total</b>	<b>3.0742</b>	<b>23.3619</b>	<b>21.8518</b>	<b>0.0943</b>	<b>4.9794</b>	<b>0.1489</b>	<b>5.1282</b>	<b>1.3488</b>	<b>0.1415</b>	<b>1.4902</b>		<b>9,651.1072</b>	<b>9,651.1072</b>	<b>0.5677</b>		<b>9,665.3000</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7821	21.9437	4.5838	0.0535	1.2334	0.1222	1.3557	0.3552	0.1169	0.4721		5,591.2825	5,591.2825	0.4239		5,601.8793
Worker	2.2921	1.4182	17.2680	0.0408	3.7459	0.0267	3.7726	0.9936	0.0246	1.0182		4,059.8247	4,059.8247	0.1438		4,063.4207
<b>Total</b>	<b>3.0742</b>	<b>23.3619</b>	<b>21.8518</b>	<b>0.0943</b>	<b>4.9794</b>	<b>0.1489</b>	<b>5.1282</b>	<b>1.3488</b>	<b>0.1415</b>	<b>1.4902</b>		<b>9,651.1072</b>	<b>9,651.1072</b>	<b>0.5677</b>		<b>9,665.3000</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.4588</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.6632</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0754	0.0467	0.5680	1.3400e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		133.5469	133.5469	4.7300e-003		133.6652
<b>Total</b>	<b>0.0754</b>	<b>0.0467</b>	<b>0.5680</b>	<b>1.3400e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>133.5469</b>	<b>133.5469</b>	<b>4.7300e-003</b>		<b>133.6652</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.4110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>36.6532</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4574	0.2830	3.4460	8.1400e-003	0.7475	5.3200e-003	0.7529	0.1983	4.9000e-003	0.2032		810.1843	810.1843	0.0287		810.9019
<b>Total</b>	<b>0.4574</b>	<b>0.2830</b>	<b>3.4460</b>	<b>8.1400e-003</b>	<b>0.7475</b>	<b>5.3200e-003</b>	<b>0.7529</b>	<b>0.1983</b>	<b>4.9000e-003</b>	<b>0.2032</b>		<b>810.1843</b>	<b>810.1843</b>	<b>0.0287</b>		<b>810.9019</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.4110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>36.4705</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4574	0.2830	3.4460	8.1400e-003	0.7475	5.3200e-003	0.7529	0.1983	4.9000e-003	0.2032		810.1843	810.1843	0.0287		810.9019
<b>Total</b>	<b>0.4574</b>	<b>0.2830</b>	<b>3.4460</b>	<b>8.1400e-003</b>	<b>0.7475</b>	<b>5.3200e-003</b>	<b>0.7529</b>	<b>0.1983</b>	<b>4.9000e-003</b>	<b>0.2032</b>		<b>810.1843</b>	<b>810.1843</b>	<b>0.0287</b>		<b>810.9019</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	27.6084	195.1298	338.1336	1.5536	112.6602	1.1415	113.8017	30.1774	1.0719	31.2494		158,176.9955	158,176.9955	5.6849		158,319.1175
Unmitigated	27.6084	195.1298	338.1336	1.5536	112.6602	1.1415	113.8017	30.1774	1.0719	31.2494		158,176.9955	158,176.9955	5.6849		158,319.1175

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
NaturalGas Unmitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.1289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0531289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Unmitigated	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0570	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
<b>Total</b>	<b>13.6857</b>	<b>5.6100e-003</b>	<b>0.6192</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4600e-003</b>		<b>1.4172</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0570	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
<b>Total</b>	<b>13.6857</b>	<b>5.6100e-003</b>	<b>0.6192</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4600e-003</b>		<b>1.4172</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	110.00	209.00
tblConstructionPhase	NumDays	1,550.00	272.00
tblConstructionPhase	NumDays	155.00	65.00
tblConstructionPhase	NumDays	110.00	76.00
tblConstructionPhase	NumDays	60.00	45.00
tblConstructionPhase	PhaseEndDate	1/18/2022	12/31/2020
tblConstructionPhase	PhaseEndDate	11/29/2019	11/30/2019
tblConstructionPhase	PhaseEndDate	3/31/2021	8/15/2020
tblConstructionPhase	PhaseEndDate	8/30/2019	8/31/2019
tblConstructionPhase	PhaseStartDate	4/1/2021	3/15/2020
tblConstructionPhase	PhaseStartDate	11/30/2019	12/1/2019
tblConstructionPhase	PhaseStartDate	8/31/2019	9/1/2019
tblConstructionPhase	PhaseStartDate	12/16/2020	5/1/2020
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblGrading	AcresOfGrading	162.50	387.50
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00
tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00
tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00
tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	5.6151	54.6055	40.0557	0.1156	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	11,672.27 31	11,672.27 31	1.9491	0.0000	11,704.77 89
2020	45.5274	59.3744	56.6626	0.1480	5.8501	2.1387	7.9888	1.5797	2.0038	3.5835	0.0000	14,787.75 35	14,787.75 35	1.9895	0.0000	14,837.49 12
Maximum	45.5274	59.3744	56.6626	0.1480	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	14,787.75 35	14,787.75 35	1.9895	0.0000	14,837.49 12

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.9278	41.4750	40.7657	0.1156	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	11,672.27 31	11,672.27 31	1.9491	0.0000	11,704.77 89
2020	43.1031	51.3172	60.3324	0.1480	5.8501	0.3991	6.2492	1.5797	0.3911	1.9708	0.0000	14,787.75 35	14,787.75 35	1.9895	0.0000	14,837.49 11
Maximum	43.1031	51.3172	60.3324	0.1480	8.2777	1.1261	8.4207	4.5080	1.0451	4.6510	0.0000	14,787.75 35	14,787.75 35	1.9895	0.0000	14,837.49 11

	ROG	NOx	CO	SO2	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	8.04	18.59	-4.53	0.00	41.29	66.33	48.70	47.29	65.84	57.97	0.00	0.00	0.00	0.00	0.00	0.00



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	21.8499	203.9184	290.6331	1.4223	112.6602	1.1453	113.8055	30.1774	1.0756	31.2530		145,024.6178	145,024.6178	5.8003		145,169.6251
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>42.9256</b>	<b>236.9700</b>	<b>313.0620</b>	<b>1.4782</b>	<b>112.6602</b>	<b>2.4746</b>	<b>115.1348</b>	<b>30.1774</b>	<b>2.4049</b>	<b>32.5823</b>		<b>152,948.4151</b>	<b>152,948.4151</b>	<b>6.4011</b>	<b>1.1000e-004</b>	<b>153,108.4769</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**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	lb/day										lb/day					
Area	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	21.8499	203.9184	290.6331	1.4223	112.6602	1.1453	113.8055	30.1774	1.0756	31.2530		145,024.6178	145,024.6178	5.8003		145,169.6251
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>42.9256</b>	<b>236.9700</b>	<b>313.0620</b>	<b>1.4782</b>	<b>112.6602</b>	<b>2.4746</b>	<b>115.1348</b>	<b>30.1774</b>	<b>2.4049</b>	<b>32.5823</b>		<b>152,948.4151</b>	<b>152,948.4151</b>	<b>6.4011</b>	<b>1.1000e-004</b>	<b>153,108.4769</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	8/31/2019	5	45	
2	Grading	Grading	9/1/2019	11/30/2019	5	65	
3	Building Construction	Building Construction	12/1/2019	12/15/2020	5	272	
4	Paving	Paving	5/1/2020	8/15/2020	5	76	
5	Architectural Coating	Architectural Coating	3/15/2020	12/31/2020	5	209	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 387.5**

**Acres of Paving: 77.49**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 794,660; Non-Residential Outdoor: 264,887; Striped Parking Area: 35,010 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	456.00	182.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	91.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.3443	0.0000	12.3443	3.9929	0.0000	3.9929			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>4.7389</b>	<b>54.5202</b>	<b>33.3768</b>	<b>0.0620</b>	<b>12.3443</b>	<b>2.3827</b>	<b>14.7270</b>	<b>3.9929</b>	<b>2.1920</b>	<b>6.1849</b>		<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.5549	0.0000	5.5549	1.7968	0.0000	1.7968			0.0000			0.0000
Off-Road	2.9080	41.3897	36.6894	0.0620		1.1249	1.1249		1.0439	1.0439	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
<b>Total</b>	<b>2.9080</b>	<b>41.3897</b>	<b>36.6894</b>	<b>0.0620</b>	<b>5.5549</b>	<b>1.1249</b>	<b>6.6798</b>	<b>1.7968</b>	<b>1.0439</b>	<b>2.8407</b>	<b>0.0000</b>	<b>6,140.0195</b>	<b>6,140.0195</b>	<b>1.9426</b>		<b>6,188.5854</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0113	24.5788	6.2356	0.0521	1.2334	0.1949	1.4283	0.3552	0.1865	0.5416		5,445.398 9	5,445.398 9	0.5225		5,458.462 5
Worker	2.2426	1.9446	16.6564	0.0366	3.7459	0.0276	3.7736	0.9936	0.0255	1.0191		3,635.294 0	3,635.294 0	0.1464		3,638.953 0
<b>Total</b>	<b>3.2539</b>	<b>26.5234</b>	<b>22.8919</b>	<b>0.0887</b>	<b>4.9794</b>	<b>0.2226</b>	<b>5.2019</b>	<b>1.3488</b>	<b>0.2120</b>	<b>1.5607</b>		<b>9,080.692 9</b>	<b>9,080.692 9</b>	<b>0.6689</b>		<b>9,097.415 4</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0113	24.5788	6.2356	0.0521	1.2334	0.1949	1.4283	0.3552	0.1865	0.5416		5,445.3989	5,445.3989	0.5225		5,458.4625
Worker	2.2426	1.9446	16.6564	0.0366	3.7459	0.0276	3.7736	0.9936	0.0255	1.0191		3,635.2940	3,635.2940	0.1464		3,638.9530
<b>Total</b>	<b>3.2539</b>	<b>26.5234</b>	<b>22.8919</b>	<b>0.0887</b>	<b>4.9794</b>	<b>0.2226</b>	<b>5.2019</b>	<b>1.3488</b>	<b>0.2120</b>	<b>1.5607</b>		<b>9,080.6929</b>	<b>9,080.6929</b>	<b>0.6689</b>		<b>9,097.4154</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8209	22.3503	5.4363	0.0517	1.2334	0.1251	1.3585	0.3552	0.1196	0.4748		5,406.884 2	5,406.884 2	0.4784		5,418.844 0
Worker	2.0079	1.6947	14.5192	0.0354	3.7459	0.0267	3.7726	0.9936	0.0246	1.0182		3,520.307 6	3,520.307 6	0.1237		3,523.399 8
<b>Total</b>	<b>2.8288</b>	<b>24.0450</b>	<b>19.9555</b>	<b>0.0871</b>	<b>4.9794</b>	<b>0.1517</b>	<b>5.1311</b>	<b>1.3488</b>	<b>0.1442</b>	<b>1.4930</b>		<b>8,927.191 8</b>	<b>8,927.191 8</b>	<b>0.6021</b>		<b>8,942.243 8</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8209	22.3503	5.4363	0.0517	1.2334	0.1251	1.3585	0.3552	0.1196	0.4748		5,406.884 2	5,406.884 2	0.4784		5,418.844 0
Worker	2.0079	1.6947	14.5192	0.0354	3.7459	0.0267	3.7726	0.9936	0.0246	1.0182		3,520.307 6	3,520.307 6	0.1237		3,523.399 8
<b>Total</b>	<b>2.8288</b>	<b>24.0450</b>	<b>19.9555</b>	<b>0.0871</b>	<b>4.9794</b>	<b>0.1517</b>	<b>5.1311</b>	<b>1.3488</b>	<b>0.1442</b>	<b>1.4930</b>		<b>8,927.191 8</b>	<b>8,927.191 8</b>	<b>0.6021</b>		<b>8,942.243 8</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>3.4588</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.733 4</b>	<b>2,207.733 4</b>	<b>0.7140</b>		<b>2,225.584 1</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.0914	0.0914		0.0914	0.0914	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	2.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>2.6632</b>	<b>11.2952</b>	<b>17.2957</b>	<b>0.0228</b>		<b>0.0914</b>	<b>0.0914</b>		<b>0.0914</b>	<b>0.0914</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0661	0.0558	0.4776	1.1600e-003	0.1232	8.8000e-004	0.1241	0.0327	8.1000e-004	0.0335		115.7996	115.7996	4.0700e-003		115.9013
<b>Total</b>	<b>0.0661</b>	<b>0.0558</b>	<b>0.4776</b>	<b>1.1600e-003</b>	<b>0.1232</b>	<b>8.8000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.1000e-004</b>	<b>0.0335</b>		<b>115.7996</b>	<b>115.7996</b>	<b>4.0700e-003</b>		<b>115.9013</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.4110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>36.6532</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4007	0.3382	2.8975	7.0600e-003	0.7475	5.3200e-003	0.7529	0.1983	4.9000e-003	0.2032		702.5175	702.5175	0.0247		703.1346
<b>Total</b>	<b>0.4007</b>	<b>0.3382</b>	<b>2.8975</b>	<b>7.0600e-003</b>	<b>0.7475</b>	<b>5.3200e-003</b>	<b>0.7529</b>	<b>0.1983</b>	<b>4.9000e-003</b>	<b>0.2032</b>		<b>702.5175</b>	<b>702.5175</b>	<b>0.0247</b>		<b>703.1346</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.4110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>36.4705</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.4007	0.3382	2.8975	7.0600e-003	0.7475	5.3200e-003	0.7529	0.1983	4.9000e-003	0.2032		702.5175	702.5175	0.0247		703.1346
<b>Total</b>	<b>0.4007</b>	<b>0.3382</b>	<b>2.8975</b>	<b>7.0600e-003</b>	<b>0.7475</b>	<b>5.3200e-003</b>	<b>0.7529</b>	<b>0.1983</b>	<b>4.9000e-003</b>	<b>0.2032</b>		<b>702.5175</b>	<b>702.5175</b>	<b>0.0247</b>		<b>703.1346</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.8499	203.9184	290.6331	1.4223	112.6602	1.1453	113.8055	30.1774	1.0756	31.2530		145,024.6 178	145,024.6 178	5.8003		145,169.6 251
Unmitigated	21.8499	203.9184	290.6331	1.4223	112.6602	1.1453	113.8055	30.1774	1.0756	31.2530		145,024.6 178	145,024.6 178	5.8003		145,169.6 251

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Parking Lot	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Hotel	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Movie Theater (No Matinee)	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Regional Shopping Center	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
NaturalGas Unmitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.1289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0531289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
Unmitigated	13.6857	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0570	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
<b>Total</b>	<b>13.6857</b>	<b>5.6100e-003</b>	<b>0.6192</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4600e-003</b>		<b>1.4172</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0570	5.6100e-003	0.6192	5.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003		1.3307	1.3307	3.4600e-003		1.4172
<b>Total</b>	<b>13.6857</b>	<b>5.6100e-003</b>	<b>0.6192</b>	<b>5.0000e-005</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>2.2000e-003</b>	<b>2.2000e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4600e-003</b>		<b>1.4172</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## **11.0 Vegetation**

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Redding Rancheria FTT and Casino Project – Alternative E  
Shasta County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.16	0.00	0.00	0.83	0.83	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.30	0.12	-0.03	0.00	0.77	0.77	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.38	0.24	-0.10	0.00	0.53	0.52	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.23	0.20	-0.17	0.00	0.88	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	2	2	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	2	2	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	9	9	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	2.53100E-002	1.75960E-001	1.91380E-001	3.10000E-004	1.15900E-002	1.15900E-002	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67332E+001
Cranes	5.44400E-002	6.47520E-001	2.53440E-001	6.90000E-004	2.67600E-002	2.46200E-002	0.00000E+000	6.04326E+001	6.04326E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	1.69500E-002	1.74320E-001	2.12110E-001	3.40000E-004	8.41000E-003	7.73000E-003	0.00000E+000	3.01396E+001	3.01396E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	5.92800E-002	5.33700E-001	4.82010E-001	6.20000E-004	3.99000E-002	3.67100E-002	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53324E+001
Generator Sets	5.47700E-002	4.76380E-001	5.04150E-001	8.90000E-004	2.70100E-002	2.70100E-002	0.00000E+000	7.68682E+001	7.68682E+001	4.37000E-003	0.00000E+000	7.69775E+001
Graders	1.58200E-002	2.13840E-001	5.97400E-002	2.20000E-004	6.86000E-003	6.31000E-003	0.00000E+000	1.93892E+001	1.93892E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	1.99600E-002	2.13580E-001	2.20270E-001	3.60000E-004	1.03800E-002	9.55000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	1.57700E-002	1.62740E-001	1.92610E-001	3.10000E-004	8.14000E-003	7.49000E-003	0.00000E+000	2.72012E+001	2.72012E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	1.58200E-002	1.58170E-001	1.43900E-001	2.00000E-004	1.00800E-002	9.28000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	1.13460E-001	1.20744E+000	4.28410E-001	8.50000E-004	5.88700E-002	5.41600E-002	0.00000E+000	7.66960E+001	7.66960E+001	2.42700E-002	0.00000E+000	7.73026E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84396E+001	8.84396E+001	2.79800E-002	0.00000E+000	8.91391E+001
Tractors/Loaders/Backhoes	1.11550E-001	1.12053E+000	1.17143E+000	1.59000E-003	7.23700E-002	6.65800E-002	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	4.70000E-002	2.14280E-001	2.40760E-001	3.50000E-004	1.19600E-002	1.19600E-002	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	6.21000E-003	1.41800E-001	1.91490E-001	3.10000E-004	1.49000E-003	1.49000E-003	0.00000E+000	2.66815E+001	2.66815E+001	2.07000E-003	0.00000E+000	2.67331E+001
Cranes	1.68700E-002	3.26190E-001	3.65560E-001	6.90000E-004	1.86000E-003	1.86000E-003	0.00000E+000	6.04325E+001	6.04325E+001	1.95100E-002	0.00000E+000	6.09203E+001
Excavators	8.26000E-003	1.59690E-001	2.54670E-001	3.40000E-004	1.16000E-003	1.16000E-003	0.00000E+000	3.01395E+001	3.01395E+001	9.54000E-003	0.00000E+000	3.03779E+001
Forklifts	1.53700E-002	3.50960E-001	4.73920E-001	6.20000E-004	3.69000E-003	3.69000E-003	0.00000E+000	5.48893E+001	5.48893E+001	1.77200E-002	0.00000E+000	5.53323E+001
Generator Sets	1.78900E-002	4.08530E-001	5.51660E-001	8.90000E-004	4.29000E-003	4.29000E-003	0.00000E+000	7.68681E+001	7.68681E+001	4.37000E-003	0.00000E+000	7.69774E+001
Graders	5.27000E-003	1.01960E-001	1.14260E-001	2.20000E-004	5.80000E-004	5.80000E-004	0.00000E+000	1.93891E+001	1.93891E+001	6.13000E-003	0.00000E+000	1.95425E+001
Pavers	8.78000E-003	1.69790E-001	2.70790E-001	3.60000E-004	1.23000E-003	1.23000E-003	0.00000E+000	3.13892E+001	3.13892E+001	1.01500E-002	0.00000E+000	3.16430E+001
Paving Equipment	7.64000E-003	1.47780E-001	2.35680E-001	3.10000E-004	1.07000E-003	1.07000E-003	0.00000E+000	2.72011E+001	2.72011E+001	8.80000E-003	0.00000E+000	2.74211E+001
Rollers	4.89000E-003	1.11650E-001	1.50770E-001	2.00000E-004	1.17000E-003	1.17000E-003	0.00000E+000	1.75169E+001	1.75169E+001	5.67000E-003	0.00000E+000	1.76585E+001
Rubber Tired Dozers	2.09100E-002	4.04270E-001	4.53060E-001	8.50000E-004	2.30000E-003	2.30000E-003	0.00000E+000	7.66959E+001	7.66959E+001	2.42700E-002	0.00000E+000	7.73025E+001
Scrapers	6.92400E-002	8.39400E-001	5.23990E-001	9.80000E-004	3.28900E-002	3.02600E-002	0.00000E+000	8.84395E+001	8.84395E+001	2.79800E-002	0.00000E+000	8.91390E+001
Tractors/Loaders/Balckhoes	3.88900E-002	8.88010E-001	1.19914E+000	1.59000E-003	9.33000E-003	9.33000E-003	0.00000E+000	1.40830E+002	1.40830E+002	4.51900E-002	0.00000E+000	1.41960E+002
Welders	1.44000E-002	2.29890E-001	2.03570E-001	3.50000E-004	2.09000E-003	2.09000E-003	0.00000E+000	2.55980E+001	2.55980E+001	3.82000E-003	0.00000E+000	2.56936E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.54642E-001	1.94135E-001	-5.74773E-004	0.00000E+000	8.71441E-001	8.71441E-001	0.00000E+000	1.12437E-006	1.12437E-006	0.00000E+000	0.00000E+000	1.49627E-006
Cranes	6.90118E-001	4.96247E-001	-4.42393E-001	0.00000E+000	9.30493E-001	9.24452E-001	0.00000E+000	1.15832E-006	1.15832E-006	0.00000E+000	0.00000E+000	1.14904E-006
Excavators	5.12684E-001	8.39261E-002	-2.00651E-001	0.00000E+000	8.62069E-001	8.49935E-001	0.00000E+000	1.32716E-006	1.32716E-006	0.00000E+000	0.00000E+000	9.87559E-007
Forklifts	7.40722E-001	3.42402E-001	1.67839E-002	0.00000E+000	9.07519E-001	8.99482E-001	0.00000E+000	1.09311E-006	1.09311E-006	0.00000E+000	0.00000E+000	1.26508E-006
Generator Sets	6.73361E-001	1.42428E-001	-9.42378E-002	0.00000E+000	8.41170E-001	8.41170E-001	0.00000E+000	1.17084E-006	1.17084E-006	0.00000E+000	0.00000E+000	1.29908E-006
Graders	6.66877E-001	5.23195E-001	-9.12621E-001	0.00000E+000	9.15452E-001	9.08082E-001	0.00000E+000	1.03150E-006	1.03150E-006	0.00000E+000	0.00000E+000	1.53511E-006
Pavers	5.60120E-001	2.05029E-001	-2.29355E-001	0.00000E+000	8.81503E-001	8.71204E-001	0.00000E+000	1.27432E-006	1.27432E-006	0.00000E+000	0.00000E+000	1.26410E-006
Paving Equipment	5.15536E-001	9.19258E-002	-2.23612E-001	0.00000E+000	8.68550E-001	8.57143E-001	0.00000E+000	1.47053E-006	1.47053E-006	0.00000E+000	0.00000E+000	1.09405E-006
Rollers	6.90898E-001	2.94114E-001	-4.77415E-002	0.00000E+000	8.83929E-001	8.73922E-001	0.00000E+000	1.14176E-006	1.14176E-006	0.00000E+000	0.00000E+000	1.13260E-006
Rubber Tired Dozers	8.15706E-001	6.65184E-001	-5.75383E-002	0.00000E+000	9.60931E-001	9.57533E-001	0.00000E+000	1.17346E-006	1.17346E-006	0.00000E+000	0.00000E+000	1.29362E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13072E-006	1.13072E-006	0.00000E+000	0.00000E+000	1.23403E-006
Tractors/Loaders/Backhoes	6.51367E-001	2.07509E-001	-2.36548E-002	0.00000E+000	8.71079E-001	8.59868E-001	0.00000E+000	1.13612E-006	1.13612E-006	0.00000E+000	0.00000E+000	1.19752E-006
Welders	6.93617E-001	-7.28486E-002	1.54469E-001	0.00000E+000	8.25251E-001	8.25251E-001	0.00000E+000	1.17197E-006	1.17197E-006	0.00000E+000	0.00000E+000	1.16761E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.07	0.02	0.07	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.65	0.18	0.65	0.18	0.00	0.00
Grading	Fugitive Dust	0.40	0.13	0.18	0.06	0.55	0.55
Grading	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.41	0.22	0.18	0.10	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary



Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.04	29.13	29.60	29.60	29.30
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

### Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.44		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

### Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

### Solid Waste Mitigation

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Annual

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00

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tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00



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tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50

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tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00

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tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00
tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

## 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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

### 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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

[illegible]

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.0358	0.0358
		Highest	0.0358	0.0358

**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	2.4923	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Energy	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	594.9094	594.9094	0.0269	5.5700e-003	597.2425
Mobile	2.1947	27.8887	27.6957	0.2297	19.5153	0.0886	19.6039	5.2443	0.0831	5.3274	0.0000	21,358.4743	21,358.4743	0.8149	0.0000	21,378.8463
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	261.4524	0.0000	261.4524	15.4514	0.0000	647.7372
Water						0.0000	0.0000		0.0000	0.0000	23.5996	120.9262	144.5258	2.4294	0.0584	222.6527
<b>Total</b>	<b>4.7658</b>	<b>28.2409</b>	<b>28.4933</b>	<b>0.2338</b>	<b>19.5153</b>	<b>0.1441</b>	<b>19.6595</b>	<b>5.2443</b>	<b>0.1387</b>	<b>5.3829</b>	<b>285.0519</b>	<b>22,795.6662</b>	<b>23,080.7181</b>	<b>18.7390</b>	<b>0.0639</b>	<b>23,568.2482</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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	2.4923	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Energy	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	594.9094	594.9094	0.0269	5.5700e-003	597.2425
Mobile	2.1947	27.8887	27.6957	0.2297	19.5153	0.0886	19.6039	5.2443	0.0831	5.3274	0.0000	21,358.4743	21,358.4743	0.8149	0.0000	21,378.8463
Stationary	0.0786	0.3507	0.7413	4.0700e-003		0.0553	0.0553		0.0553	0.0553	0.0000	721.2477	721.2477	0.0163	0.0000	721.6539
Waste						0.0000	0.0000		0.0000	0.0000	261.4524	0.0000	261.4524	15.4514	0.0000	647.7372
Water						0.0000	0.0000		0.0000	0.0000	16.6141	85.8065	102.4206	1.7103	0.0411	157.4246
<b>Total</b>	<b>4.7658</b>	<b>28.2409</b>	<b>28.4933</b>	<b>0.2338</b>	<b>19.5153</b>	<b>0.1441</b>	<b>19.6595</b>	<b>5.2443</b>	<b>0.1387</b>	<b>5.3829</b>	<b>278.0665</b>	<b>22,760.5465</b>	<b>23,038.6129</b>	<b>18.0200</b>	<b>0.0467</b>	<b>23,503.0201</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.45</b>	<b>0.15</b>	<b>0.18</b>	<b>3.84</b>	<b>27.00</b>	<b>0.28</b>

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**2.3 Vegetation****Vegetation**

	CO2e
Category	MT
Vegetation Land Change	-129.3000
<b>Total</b>	<b>-129.3000</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0****Acres of Grading (Grading Phase): 0****Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**



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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**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					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

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**3.2 Site Preparation - 2019****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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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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					
Mitigated	2.1947	27.8887	27.6957	0.2297	19.5153	0.0886	19.6039	5.2443	0.0831	5.3274	0.0000	21,358.47 43	21,358.47 43	0.8149	0.0000	21,378.84 63
Unmitigated	2.1947	27.8887	27.6957	0.2297	19.5153	0.0886	19.6039	5.2443	0.0831	5.3274	0.0000	21,358.47 43	21,358.47 43	0.8149	0.0000	21,378.84 63

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

## 4.3 Trip Type Information

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	593.8746	593.8746	0.0269	5.5600e-003	596.2015
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	593.8746	593.8746	0.0269	5.5600e-003	596.2015
NaturalGas Mitigated	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
NaturalGas Unmitigated	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410

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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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19392.1	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
<b>Total</b>		<b>1.0000e-004</b>	<b>9.5000e-004</b>	<b>8.0000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0348</b>	<b>1.0348</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0410</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.2 Energy by Land Use - NaturalGas****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					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	19392.1	1.0000e-004	9.5000e-004	8.0000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0348	1.0348	2.0000e-005	2.0000e-005	1.0410
<b>Total</b>		<b>1.0000e-004</b>	<b>9.5000e-004</b>	<b>8.0000e-004</b>	<b>1.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>		<b>7.0000e-005</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.0348</b>	<b>1.0348</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>1.0410</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.04143e+006	593.8746	0.0269	5.5600e-003	596.2015
<b>Total</b>		<b>593.8746</b>	<b>0.0269</b>	<b>5.5600e-003</b>	<b>596.2015</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2.04143e+006	593.8746	0.0269	5.5600e-003	596.2015
<b>Total</b>		<b>593.8746</b>	<b>0.0269</b>	<b>5.5600e-003</b>	<b>596.2015</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	2.4923	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
Unmitigated	2.4923	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157

## 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	0.3805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0800e-003	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
<b>Total</b>	<b>2.4923</b>	<b>5.0000e-004</b>	<b>0.0555</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1087</b>	<b>0.1087</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1157</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**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	0.3805					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0800e-003	5.0000e-004	0.0555	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004	0.0000	0.1087	0.1087	2.8000e-004	0.0000	0.1157
<b>Total</b>	<b>2.4923</b>	<b>5.0000e-004</b>	<b>0.0555</b>	<b>0.0000</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>		<b>2.0000e-004</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>0.1087</b>	<b>0.1087</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.1157</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	102.4206	1.7103	0.0411	157.4246
Unmitigated	144.5258	2.4294	0.0584	222.6527

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	4.55131 / 0.230268	8.8427	0.1486	3.5700e-003	13.6228
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	16.6392 / 0.841839	32.3281	0.5434	0.0131	49.8039
Movie Theater (No Matinee)	10.9623 / 0.554623	21.2985	0.3580	8.6000e-003	32.8120
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	10.2282 / 0.517483	19.8723	0.3340	8.0300e-003	30.6148
User Defined Recreational	32.006 / 1.6193	62.1841	1.0453	0.0251	95.7993
<b>Total</b>		<b>144.5257</b>	<b>2.4294</b>	<b>0.0584</b>	<b>222.6527</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	3.20412 / 0.202636	6.2665	0.1046	2.5100e-003	9.6319
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Hotel	11.714 / 0.740818	22.9099	0.3826	9.1900e-003	35.2134
Movie Theater (No Matinee)	7.71746 / 0.488068	15.0936	0.2521	6.0600e-003	23.1994
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	7.20066 / 0.455385	14.0828	0.2352	5.6500e-003	21.6459
User Defined Recreational	22.5322 / 1.42499	44.0678	0.7359	0.0177	67.7340
<b>Total</b>		<b>102.4206</b>	<b>1.7103</b>	<b>0.0411</b>	<b>157.4246</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	261.4524	15.4514	0.0000	647.7372
Unmitigated	261.4524	15.4514	0.0000	647.7372



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1288	261.4524	15.4514	0.0000	647.7372
<b>Total</b>		<b>261.4524</b>	<b>15.4514</b>	<b>0.0000</b>	<b>647.7372</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Hotel	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	1288	261.4524	15.4514	0.0000	647.7372
<b>Total</b>		<b>261.4524</b>	<b>15.4514</b>	<b>0.0000</b>	<b>647.7372</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	0.5	6	2923	0.73	Diesel

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	tons/yr										MT/yr					
Boiler - CNG (0 - 2 MMBTU)	0.0354	0.1577	0.6313	3.8600e-003		0.0490	0.0490		0.0490	0.0490	0.0000	701.2124	701.2124	0.0134	0.0000	701.5484
Emergency Generator - Diesel (750 - 9999 HP)	0.0432	0.1931	0.1101	2.1000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	20.0353	20.0353	2.8100e-003	0.0000	20.1055
<b>Total</b>	<b>0.0786</b>	<b>0.3507</b>	<b>0.7413</b>	<b>4.0700e-003</b>		<b>0.0553</b>	<b>0.0553</b>		<b>0.0553</b>	<b>0.0553</b>	<b>0.0000</b>	<b>721.2477</b>	<b>721.2477</b>	<b>0.0163</b>	<b>0.0000</b>	<b>721.6539</b>

**11.0 Vegetation**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	-129.3000	0.0000	0.0000	-129.3000

## 11.1 Vegetation Land Change

Vegetation Type

	Initial/Final	Total CO2	CH4	N2O	CO2e
	Acres	MT			
Grassland	55 / 25	-129.3000	0.0000	0.0000	-129.3000
<b>Total</b>		<b>-129.3000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>-129.3000</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Summer

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.7	<b>Precipitation Freq (Days)</b>	82
<b>Climate Zone</b>	3			<b>Operational Year</b>	2040
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00
tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

[illegible]

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	14.1137	151.0766	177.6287	1.3369	112.5917	0.4864	113.0782	30.1313	0.4565	30.5879		136,870.9346	136,870.9346	4.8101		136,991.1862
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>35.1889</b>	<b>184.1281</b>	<b>200.0552</b>	<b>1.3927</b>	<b>112.5917</b>	<b>1.8157</b>	<b>114.4074</b>	<b>30.1313</b>	<b>1.7858</b>	<b>31.9171</b>		<b>144,794.7319</b>	<b>144,794.7319</b>	<b>5.4108</b>	<b>1.1000e-004</b>	<b>144,930.0372</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**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	lb/day										lb/day					
Area	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	14.1137	151.0766	177.6287	1.3369	112.5917	0.4864	113.0782	30.1313	0.4565	30.5879		136,870.9346	136,870.9346	4.8101		136,991.1862
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>35.1889</b>	<b>184.1281</b>	<b>200.0552</b>	<b>1.3927</b>	<b>112.5917</b>	<b>1.8157</b>	<b>114.4074</b>	<b>30.1313</b>	<b>1.7858</b>	<b>31.9171</b>		<b>144,794.7319</b>	<b>144,794.7319</b>	<b>5.4108</b>	<b>1.1000e-004</b>	<b>144,930.0372</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.1137	151.0766	177.6287	1.3369	112.5917	0.4864	113.0782	30.1313	0.4565	30.5879		136,870.9346	136,870.9346	4.8101		136,991.1862
Unmitigated	14.1137	151.0766	177.6287	1.3369	112.5917	0.4864	113.0782	30.1313	0.4565	30.5879		136,870.9346	136,870.9346	4.8101		136,991.1862

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

**4.3 Trip Type Information**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
NaturalGas Unmitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.1289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0531289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Unmitigated	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0564	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
<b>Total</b>	<b>13.6852</b>	<b>5.5400e-003</b>	<b>0.6168</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4300e-003</b>		<b>1.4164</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0564	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
<b>Total</b>	<b>13.6852</b>	<b>5.5400e-003</b>	<b>0.6168</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4300e-003</b>		<b>1.4164</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
----------------	--------

**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Summer

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Winter

## 1.0 Project Characteristics

### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,650.00	Space	16.51	583,500.00	0
Parking Lot	600.00	Space	60.98	0.00	0
Arena	10.08	1000sqft	0.19	10,080.00	0
Hotel	250.00	Room	3.23	177,367.00	0
Movie Theater (No Matinee)	3,300.00	Seat	1.38	72,000.00	0
User Defined Recreational	150.33	User Defined Unit	2.88	150,326.00	0
Regional Shopping Center	120.00	1000sqft	2.49	120,000.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

Project Characteristics - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod Table in Appendix Q of the EIS.

Off-road Equipment -

Architectural Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	60.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblConstructionPhase	PhaseEndDate	8/30/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	LightingElect	1.55	0.00
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	3.81	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	2.30	0.00
tblEnergyUse	NT24E	0.00	13.58
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	7.16	0.00
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	2.08	0.00
tblEnergyUse	NT24NG	0.00	0.13
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24E	4.33	0.00
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	2.24	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	18.08	0.00
tblEnergyUse	T24NG	17.11	0.00
tblEnergyUse	T24NG	8.66	0.00
tblLandUse	BuildingSpaceSquareFeet	660,000.00	583,500.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblLandUse	BuildingSpaceSquareFeet	240,000.00	0.00
tblLandUse	BuildingSpaceSquareFeet	363,000.00	177,367.00
tblLandUse	BuildingSpaceSquareFeet	74,250.00	72,000.00
tblLandUse	BuildingSpaceSquareFeet	0.00	150,326.00
tblLandUse	LandUseSquareFeet	660,000.00	583,500.00
tblLandUse	LandUseSquareFeet	240,000.00	0.00
tblLandUse	LandUseSquareFeet	363,000.00	177,367.00
tblLandUse	LandUseSquareFeet	74,250.00	72,000.00
tblLandUse	LandUseSquareFeet	0.00	150,326.00
tblLandUse	LotAcreage	14.85	16.51
tblLandUse	LotAcreage	5.40	60.98
tblLandUse	LotAcreage	3.24	0.19
tblLandUse	LotAcreage	8.33	3.23
tblLandUse	LotAcreage	1.70	1.38
tblLandUse	LotAcreage	0.00	2.88
tblLandUse	LotAcreage	2.75	2.49
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	136.88	0.00
tblSolidWaste	SolidWasteGenerationRate	126.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	1,288.00
tblStationaryBoilersUse	AnnualHeatInput	0.00	4,380.00
tblStationaryBoilersUse	BoilerRatingValue	0.00	0.50
tblStationaryBoilersUse	DailyHeatInput	0.00	12.00
tblStationaryBoilersUse	NumberOfEquipment	0.00	3.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	2,923.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.50

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	6.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TL	7.30	9.50
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TL	7.30	25.00
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	38.00	0.00
tblVehicleTrips	DV_TP	17.00	0.00
tblVehicleTrips	DV_TP	35.00	10.00
tblVehicleTrips	DV_TP	0.00	10.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	4.00	0.00
tblVehicleTrips	PB_TP	17.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblVehicleTrips	PB_TP	11.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	58.00	100.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	54.00	90.00
tblVehicleTrips	PR_TP	0.00	90.00
tblVehicleTrips	ST_TR	10.71	67.01
tblVehicleTrips	ST_TR	8.19	2.04
tblVehicleTrips	ST_TR	2.24	0.23
tblVehicleTrips	ST_TR	49.97	22.52
tblVehicleTrips	ST_TR	0.00	33.67
tblVehicleTrips	SU_TR	10.71	67.01
tblVehicleTrips	SU_TR	5.95	2.04
tblVehicleTrips	SU_TR	1.85	0.23
tblVehicleTrips	SU_TR	25.24	22.52
tblVehicleTrips	SU_TR	0.00	33.67
tblVehicleTrips	WD_TR	10.71	67.01
tblVehicleTrips	WD_TR	8.17	2.04
tblVehicleTrips	WD_TR	1.76	0.23
tblVehicleTrips	WD_TR	42.70	22.52
tblVehicleTrips	WD_TR	0.00	33.67
tblWater	IndoorWaterUseRate	4,342,162.79	4,551,310.00
tblWater	IndoorWaterUseRate	6,341,692.50	16,639,197.00
tblWater	IndoorWaterUseRate	29,818,908.53	10,962,295.00
tblWater	IndoorWaterUseRate	8,888,702.58	10,228,213.00
tblWater	IndoorWaterUseRate	0.00	32,005,985.00
tblWater	OutdoorWaterUseRate	277,159.33	230,268.00



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

tblWater	OutdoorWaterUseRate	704,632.50	841,839.00
tblWater	OutdoorWaterUseRate	1,903,334.59	554,623.00
tblWater	OutdoorWaterUseRate	5,447,914.48	517,483.00
tblWater	OutdoorWaterUseRate	0.00	1,619,302.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.9513	3,909.9513	1.1975	0.0000	3,939.8874

[illegible]

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	11.7384	153.9968	152.4951	1.2346	112.5917	0.4880	113.0798	30.1313	0.4581	30.5894		126,587.3679	126,587.3679	5.2261		126,718.0191
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>32.8135</b>	<b>187.0483</b>	<b>174.9216</b>	<b>1.2904</b>	<b>112.5917</b>	<b>1.8173</b>	<b>114.4091</b>	<b>30.1313</b>	<b>1.7874</b>	<b>31.9187</b>		<b>134,511.1652</b>	<b>134,511.1652</b>	<b>5.8268</b>	<b>1.1000e-004</b>	<b>134,656.8701</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**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	lb/day										lb/day					
Area	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Energy	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
Mobile	11.7384	153.9968	152.4951	1.2346	112.5917	0.4880	113.0798	30.1313	0.4581	30.5894		126,587.3679	126,587.3679	5.2261		126,718.0191
Stationary	7.3894	33.0408	21.8053	0.0558		1.3267	1.3267		1.3267	1.3267		7,916.2162	7,916.2162	0.5972		7,931.1470
<b>Total</b>	<b>32.8135</b>	<b>187.0483</b>	<b>174.9216</b>	<b>1.2904</b>	<b>112.5917</b>	<b>1.8173</b>	<b>114.4091</b>	<b>30.1313</b>	<b>1.7874</b>	<b>31.9187</b>		<b>134,511.1652</b>	<b>134,511.1652</b>	<b>5.8268</b>	<b>1.1000e-004</b>	<b>134,656.8701</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**Acres of Paving: 77.49****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Clean Paved Roads

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**3.2 Site Preparation - 2019****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

**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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.7384	153.9968	152.4951	1.2346	112.5917	0.4880	113.0798	30.1313	0.4581	30.5894		126,587.3679	126,587.3679	5.2261		126,718.0191
Unmitigated	11.7384	153.9968	152.4951	1.2346	112.5917	0.4880	113.0798	30.1313	0.4581	30.5894		126,587.3679	126,587.3679	5.2261		126,718.0191

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	675.46	675.46	675.46	3,059,824	3,059,824
Enclosed Parking Structure	0.00	0.00	0.00		
Hotel	510.00	510.00	510.00	2,310,290	2,310,290
Movie Theater (No Matinee)	759.00	759.00	759.00	3,438,255	3,438,255
Parking Lot	0.00	0.00	0.00		
Regional Shopping Center	2,702.40	2,702.40	2,702.40	11,323,682	11,323,682
User Defined Recreational	5,061.61	5,061.61	5,061.61	32,462,448	32,462,448
Total	9,708.47	9,708.47	9,708.47	52,594,499	52,594,499

## 4.3 Trip Type Information



## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

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
Arena	9.50	9.50	25.00	0.00	81.00	19.00	100	0	0
Enclosed Parking Structure	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Hotel	9.50	9.50	25.00	19.40	61.60	19.00	100	0	0
Movie Theater (No Matinee)	9.50	9.50	25.00	1.80	79.20	19.00	100	0	0
Parking Lot	9.50	9.50	25.00	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	9.50	25.00	16.30	64.70	19.00	90	10	0
User Defined Recreational	9.50	9.50	25.00	19.00	19.40	61.60	90	10	0

## 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Parking Lot	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Hotel	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Movie Theater (No Matinee)	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Regional Shopping Center	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
NaturalGas Unmitigated	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	53.1289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**5.2 Energy by Land Use - NaturalGas****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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
Hotel	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
Movie Theater (No Matinee)	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	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
User Defined Recreational	0.0531289	5.7000e-004	5.2100e-003	4.3800e-003	3.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004		6.2505	6.2505	1.2000e-004	1.1000e-004	6.2876
<b>Total</b>		<b>5.7000e-004</b>	<b>5.2100e-003</b>	<b>4.3800e-003</b>	<b>3.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>6.2505</b>	<b>6.2505</b>	<b>1.2000e-004</b>	<b>1.1000e-004</b>	<b>6.2876</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
Unmitigated	13.6852	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164

## 6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0564	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
<b>Total</b>	<b>13.6852</b>	<b>5.5400e-003</b>	<b>0.6168</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4300e-003</b>		<b>1.4164</b>

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.0849					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	11.5438					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0564	5.5400e-003	0.6168	5.0000e-005		2.1900e-003	2.1900e-003		2.1900e-003	2.1900e-003		1.3307	1.3307	3.4300e-003		1.4164
<b>Total</b>	<b>13.6852</b>	<b>5.5400e-003</b>	<b>0.6168</b>	<b>5.0000e-005</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>2.1900e-003</b>	<b>2.1900e-003</b>		<b>1.3307</b>	<b>1.3307</b>	<b>3.4300e-003</b>		<b>1.4164</b>

**7.0 Water Detail****7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

**8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

## Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

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
Emergency Generator	3	0.5	6	2923	0.73	Diesel

**Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
Boiler	3	12	4380	0.5	CNG

**User Defined Equipment**

Equipment Type	Number
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**10.1 Stationary Sources****Unmitigated/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
Equipment Type	lb/day										lb/day					
Boiler - CNG (0 - 2 MMBTU)	0.1941	0.8640	3.4589	0.0212		0.2682	0.2682		0.2682	0.2682		4,235.3665	4,235.3665	0.0812		4,237.3959
Emergency Generator - Diesel (750 - 9999 HP)	7.1953	32.1767	18.3464	0.0346		1.0585	1.0585		1.0585	1.0585		3,680.8497	3,680.8497	0.5161		3,693.7511
<b>Total</b>	<b>7.3894</b>	<b>33.0408</b>	<b>21.8053</b>	<b>0.0558</b>		<b>1.3267</b>	<b>1.3267</b>		<b>1.3267</b>	<b>1.3267</b>		<b>7,916.2162</b>	<b>7,916.2162</b>	<b>0.5972</b>		<b>7,931.1470</b>

Redding Rancheria FTT and Casino Project – Alternative E - Shasta County, Winter

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative E

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12482E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12481E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.89031E-006

**Fugitive Dust Mitigation**

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
No	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.02	0.01	0.02	0.01	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

**Operational Percent Reduction Summary**

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.04	29.13	29.60	29.60	29.30
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.18	0.44		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Annual

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	99.00
tblConstructionPhase	NumDays	230.00	142.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	5.00	8.00
tblConstructionPhase	PhaseEndDate	7/23/2020	2/28/2020
tblConstructionPhase	PhaseEndDate	6/3/2020	2/14/2020
tblConstructionPhase	PhaseEndDate	7/17/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	6/29/2020	2/15/2020
tblConstructionPhase	PhaseEndDate	7/5/2019	7/10/2019

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

tblConstructionPhase	PhaseStartDate	6/30/2020	10/15/2019
tblConstructionPhase	PhaseStartDate	7/18/2019	8/1/2019
tblConstructionPhase	PhaseStartDate	7/6/2019	7/11/2019
tblConstructionPhase	PhaseStartDate	6/4/2020	9/1/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	7.50	4.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	81.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	72.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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					
2019	0.4853	2.9638	2.5158	5.7600e-003	0.2869	0.1322	0.4191	0.1102	0.1236	0.2338	0.0000	520.9660	520.9660	0.0834	0.0000	523.0497
2020	0.2057	0.7733	0.7489	1.7700e-003	0.0560	0.0330	0.0891	0.0152	0.0310	0.0462	0.0000	158.7357	158.7357	0.0234	0.0000	159.3215
Maximum	0.4853	2.9638	2.5158	5.7600e-003	0.2869	0.1322	0.4191	0.1102	0.1236	0.2338	0.0000	520.9660	520.9660	0.0834	0.0000	523.0497

**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					
2019	0.3239	2.2099	2.6311	5.7600e-003	0.2212	0.0195	0.2407	0.0746	0.0192	0.0938	0.0000	520.9657	520.9657	0.0834	0.0000	523.0494
2020	0.1656	0.6397	0.7865	1.7700e-003	0.0560	5.3200e-003	0.0614	0.0152	5.2400e-003	0.0204	0.0000	158.7356	158.7356	0.0234	0.0000	159.3214
Maximum	0.3239	2.2099	2.6311	5.7600e-003	0.2212	0.0195	0.2407	0.0746	0.0192	0.0938	0.0000	520.9657	520.9657	0.0834	0.0000	523.0494

	ROG	NOx	CO	SO2	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	29.15	23.75	-4.68	0.00	19.17	84.96	40.56	28.42	84.19	59.22	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	1.4327	0.9763
2	10-1-2019	12-31-2019	2.0078	1.5602
3	1-1-2020	3-31-2020	0.9631	0.7926
		Highest	2.0078	1.5602

## 2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1444	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.6958	0.6958	3.0000e-005	1.0000e-005	0.6986
Mobile	0.5401	4.7424	5.0864	0.0240	1.5632	0.0179	1.5811	0.4205	0.0168	0.4373	0.0000	2,224.3100	2,224.3100	0.1305	0.0000	2,227.5730
Waste						0.0000	0.0000		0.0000	0.0000	11.7735	0.0000	11.7735	0.6958	0.0000	29.1683
Water						0.0000	0.0000		0.0000	0.0000	5.9752	29.6470	35.6222	0.6151	0.0148	55.3993
<b>Total</b>	<b>0.6845</b>	<b>4.7425</b>	<b>5.1023</b>	<b>0.0240</b>	<b>1.5632</b>	<b>0.0179</b>	<b>1.5811</b>	<b>0.4205</b>	<b>0.0168</b>	<b>0.4373</b>	<b>17.7486</b>	<b>2,254.6837</b>	<b>2,272.4324</b>	<b>1.4415</b>	<b>0.0148</b>	<b>2,312.8721</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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	0.1444	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.6958	0.6958	3.0000e-005	1.0000e-005	0.6986
Mobile	0.5401	4.7424	5.0864	0.0240	1.5632	0.0179	1.5811	0.4205	0.0168	0.4373	0.0000	2,224.3100	2,224.3100	0.1305	0.0000	2,227.5730
Waste						0.0000	0.0000		0.0000	0.0000	11.7735	0.0000	11.7735	0.6958	0.0000	29.1683
Water						0.0000	0.0000		0.0000	0.0000	4.2065	20.8715	25.0780	0.4330	0.0104	39.0011
<b>Total</b>	<b>0.6845</b>	<b>4.7425</b>	<b>5.1023</b>	<b>0.0240</b>	<b>1.5632</b>	<b>0.0179</b>	<b>1.5811</b>	<b>0.4205</b>	<b>0.0168</b>	<b>0.4373</b>	<b>15.9800</b>	<b>2,245.9082</b>	<b>2,261.8882</b>	<b>1.2594</b>	<b>0.0104</b>	<b>2,296.4739</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9.96</b>	<b>0.39</b>	<b>0.46</b>	<b>12.63</b>	<b>29.57</b>	<b>0.71</b>

**3.0 Construction Detail****Construction Phase**



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/10/2019	5	8	
2	Grading	Grading	7/11/2019	7/31/2019	5	15	
3	Building Construction	Building Construction	8/1/2019	2/14/2020	5	142	
4	Paving	Paving	9/1/2019	2/15/2020	5	120	
5	Architectural Coating	Architectural Coating	10/15/2019	2/28/2020	5	99	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 4**

**Acres of Paving: 4.18**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 29,739; Non-Residential Outdoor: 9,913; Striped Parking Area: 36,270 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	262.00	102.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0723	0.0000	0.0723	0.0397	0.0000	0.0397	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0173	0.1823	0.0883	1.5000e-004		9.5600e-003	9.5600e-003		8.8000e-003	8.8000e-003	0.0000	13.6675	13.6675	4.3200e-003	0.0000	13.7756
<b>Total</b>	<b>0.0173</b>	<b>0.1823</b>	<b>0.0883</b>	<b>1.5000e-004</b>	<b>0.0723</b>	<b>9.5600e-003</b>	<b>0.0818</b>	<b>0.0397</b>	<b>8.8000e-003</b>	<b>0.0485</b>	<b>0.0000</b>	<b>13.6675</b>	<b>13.6675</b>	<b>4.3200e-003</b>	<b>0.0000</b>	<b>13.7756</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.2 Site Preparation - 2019****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	3.3000e-004	2.8000e-004	2.6100e-003	1.0000e-005	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5380	0.5380	2.0000e-005	0.0000	0.5386
<b>Total</b>	<b>3.3000e-004</b>	<b>2.8000e-004</b>	<b>2.6100e-003</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>5.7000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5380</b>	<b>0.5380</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5386</b>

**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					0.0325	0.0000	0.0325	0.0179	0.0000	0.0179	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7200e-003	0.0763	0.0918	1.5000e-004		5.7000e-004	5.7000e-004		5.7000e-004	5.7000e-004	0.0000	13.6675	13.6675	4.3200e-003	0.0000	13.7756
<b>Total</b>	<b>3.7200e-003</b>	<b>0.0763</b>	<b>0.0918</b>	<b>1.5000e-004</b>	<b>0.0325</b>	<b>5.7000e-004</b>	<b>0.0331</b>	<b>0.0179</b>	<b>5.7000e-004</b>	<b>0.0185</b>	<b>0.0000</b>	<b>13.6675</b>	<b>13.6675</b>	<b>4.3200e-003</b>	<b>0.0000</b>	<b>13.7756</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.2 Site Preparation - 2019****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	3.3000e-004	2.8000e-004	2.6100e-003	1.0000e-005	5.6000e-004	0.0000	5.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.5380	0.5380	2.0000e-005	0.0000	0.5386
<b>Total</b>	<b>3.3000e-004</b>	<b>2.8000e-004</b>	<b>2.6100e-003</b>	<b>1.0000e-005</b>	<b>5.6000e-004</b>	<b>0.0000</b>	<b>5.7000e-004</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>1.5000e-004</b>	<b>0.0000</b>	<b>0.5380</b>	<b>0.5380</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.5386</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0473	0.0000	0.0473	0.0251	0.0000	0.0251	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2126	0.1222	2.2000e-004		0.0105	0.0105		9.6400e-003	9.6400e-003	0.0000	19.9817	19.9817	6.3200e-003	0.0000	20.1398
<b>Total</b>	<b>0.0194</b>	<b>0.2126</b>	<b>0.1222</b>	<b>2.2000e-004</b>	<b>0.0473</b>	<b>0.0105</b>	<b>0.0578</b>	<b>0.0251</b>	<b>9.6400e-003</b>	<b>0.0347</b>	<b>0.0000</b>	<b>19.9817</b>	<b>19.9817</b>	<b>6.3200e-003</b>	<b>0.0000</b>	<b>20.1398</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.3 Grading - 2019****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	5.2000e-004	4.3000e-004	4.0800e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8407	0.8407	3.0000e-005	0.0000	0.8415
<b>Total</b>	<b>5.2000e-004</b>	<b>4.3000e-004</b>	<b>4.0800e-003</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>2.3000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.8407</b>	<b>0.8407</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8415</b>

**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					0.0213	0.0000	0.0213	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4500e-003	0.1113	0.1424	2.2000e-004		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	19.9817	19.9817	6.3200e-003	0.0000	20.1397
<b>Total</b>	<b>5.4500e-003</b>	<b>0.1113</b>	<b>0.1424</b>	<b>2.2000e-004</b>	<b>0.0213</b>	<b>8.5000e-004</b>	<b>0.0221</b>	<b>0.0113</b>	<b>8.5000e-004</b>	<b>0.0121</b>	<b>0.0000</b>	<b>19.9817</b>	<b>19.9817</b>	<b>6.3200e-003</b>	<b>0.0000</b>	<b>20.1397</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.3 Grading - 2019****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	5.2000e-004	4.3000e-004	4.0800e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.9000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8407	0.8407	3.0000e-005	0.0000	0.8415
<b>Total</b>	<b>5.2000e-004</b>	<b>4.3000e-004</b>	<b>4.0800e-003</b>	<b>1.0000e-005</b>	<b>8.8000e-004</b>	<b>1.0000e-005</b>	<b>8.9000e-004</b>	<b>2.3000e-004</b>	<b>1.0000e-005</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.8407</b>	<b>0.8407</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.8415</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1287	1.1488	0.9354	1.4700e-003		0.0703	0.0703		0.0661	0.0661	0.0000	128.1318	128.1318	0.0312	0.0000	128.9121
<b>Total</b>	<b>0.1287</b>	<b>1.1488</b>	<b>0.9354</b>	<b>1.4700e-003</b>		<b>0.0703</b>	<b>0.0703</b>		<b>0.0661</b>	<b>0.0661</b>	<b>0.0000</b>	<b>128.1318</b>	<b>128.1318</b>	<b>0.0312</b>	<b>0.0000</b>	<b>128.9121</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.4 Building Construction - 2019****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	0.0300	0.7494	0.1745	1.6200e-003	0.0362	5.8900e-003	0.0421	0.0105	5.6300e-003	0.0161	0.0000	153.8330	153.8330	0.0136	0.0000	154.1720
Worker	0.0664	0.0547	0.5173	1.1800e-003	0.1116	8.7000e-004	0.1124	0.0297	8.0000e-004	0.0305	0.0000	106.7010	106.7010	4.2100e-003	0.0000	106.8061
<b>Total</b>	<b>0.0963</b>	<b>0.8041</b>	<b>0.6918</b>	<b>2.8000e-003</b>	<b>0.1477</b>	<b>6.7600e-003</b>	<b>0.1545</b>	<b>0.0402</b>	<b>6.4300e-003</b>	<b>0.0466</b>	<b>0.0000</b>	<b>260.5340</b>	<b>260.5340</b>	<b>0.0178</b>	<b>0.0000</b>	<b>260.9781</b>

**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	0.0367	0.7753	0.9741	1.4700e-003		7.3900e-003	7.3900e-003		7.3900e-003	7.3900e-003	0.0000	128.1316	128.1316	0.0312	0.0000	128.9120
<b>Total</b>	<b>0.0367</b>	<b>0.7753</b>	<b>0.9741</b>	<b>1.4700e-003</b>		<b>7.3900e-003</b>	<b>7.3900e-003</b>		<b>7.3900e-003</b>	<b>7.3900e-003</b>	<b>0.0000</b>	<b>128.1316</b>	<b>128.1316</b>	<b>0.0312</b>	<b>0.0000</b>	<b>128.9120</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.4 Building Construction - 2019****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	0.0300	0.7494	0.1745	1.6200e-003	0.0362	5.8900e-003	0.0421	0.0105	5.6300e-003	0.0161	0.0000	153.8330	153.8330	0.0136	0.0000	154.1720
Worker	0.0664	0.0547	0.5173	1.1800e-003	0.1116	8.7000e-004	0.1124	0.0297	8.0000e-004	0.0305	0.0000	106.7010	106.7010	4.2100e-003	0.0000	106.8061
<b>Total</b>	<b>0.0963</b>	<b>0.8041</b>	<b>0.6918</b>	<b>2.8000e-003</b>	<b>0.1477</b>	<b>6.7600e-003</b>	<b>0.1545</b>	<b>0.0402</b>	<b>6.4300e-003</b>	<b>0.0466</b>	<b>0.0000</b>	<b>260.5340</b>	<b>260.5340</b>	<b>0.0178</b>	<b>0.0000</b>	<b>260.9781</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0350	0.3166	0.2780	4.4000e-004		0.0184	0.0184		0.0173	0.0173	0.0000	38.2157	38.2157	9.3200e-003	0.0000	38.4487
<b>Total</b>	<b>0.0350</b>	<b>0.3166</b>	<b>0.2780</b>	<b>4.4000e-004</b>		<b>0.0184</b>	<b>0.0184</b>		<b>0.0173</b>	<b>0.0173</b>	<b>0.0000</b>	<b>38.2157</b>	<b>38.2157</b>	<b>9.3200e-003</b>	<b>0.0000</b>	<b>38.4487</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.4 Building Construction - 2020****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	7.3400e-003	0.2066	0.0459	4.9000e-004	0.0110	1.1400e-003	0.0121	3.1700e-003	1.0900e-003	4.2600e-003	0.0000	46.2551	46.2551	3.7500e-003	0.0000	46.3489
Worker	0.0180	0.0144	0.1371	3.5000e-004	0.0338	2.5000e-004	0.0340	8.9900e-003	2.3000e-004	9.2300e-003	0.0000	31.2832	31.2832	1.0800e-003	0.0000	31.3103
<b>Total</b>	<b>0.0253</b>	<b>0.2210</b>	<b>0.1830</b>	<b>8.4000e-004</b>	<b>0.0447</b>	<b>1.3900e-003</b>	<b>0.0461</b>	<b>0.0122</b>	<b>1.3200e-003</b>	<b>0.0135</b>	<b>0.0000</b>	<b>77.5383</b>	<b>77.5383</b>	<b>4.8300e-003</b>	<b>0.0000</b>	<b>77.6591</b>

**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	0.0111	0.2347	0.2949	4.4000e-004		2.2400e-003	2.2400e-003		2.2400e-003	2.2400e-003	0.0000	38.2156	38.2156	9.3200e-003	0.0000	38.4487
<b>Total</b>	<b>0.0111</b>	<b>0.2347</b>	<b>0.2949</b>	<b>4.4000e-004</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>		<b>2.2400e-003</b>	<b>2.2400e-003</b>	<b>0.0000</b>	<b>38.2156</b>	<b>38.2156</b>	<b>9.3200e-003</b>	<b>0.0000</b>	<b>38.4487</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.4 Building Construction - 2020****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	7.3400e-003	0.2066	0.0459	4.9000e-004	0.0110	1.1400e-003	0.0121	3.1700e-003	1.0900e-003	4.2600e-003	0.0000	46.2551	46.2551	3.7500e-003	0.0000	46.3489
Worker	0.0180	0.0144	0.1371	3.5000e-004	0.0338	2.5000e-004	0.0340	8.9900e-003	2.3000e-004	9.2300e-003	0.0000	31.2832	31.2832	1.0800e-003	0.0000	31.3103
<b>Total</b>	<b>0.0253</b>	<b>0.2210</b>	<b>0.1830</b>	<b>8.4000e-004</b>	<b>0.0447</b>	<b>1.3900e-003</b>	<b>0.0461</b>	<b>0.0122</b>	<b>1.3200e-003</b>	<b>0.0135</b>	<b>0.0000</b>	<b>77.5383</b>	<b>77.5383</b>	<b>4.8300e-003</b>	<b>0.0000</b>	<b>77.6591</b>

**3.5 Paving - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0552	0.5551	0.5356	8.2000e-004		0.0313	0.0313		0.0289	0.0289	0.0000	72.7421	72.7421	0.0224	0.0000	73.3015
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0552</b>	<b>0.5551</b>	<b>0.5356</b>	<b>8.2000e-004</b>		<b>0.0313</b>	<b>0.0313</b>		<b>0.0289</b>	<b>0.0289</b>	<b>0.0000</b>	<b>72.7421</b>	<b>72.7421</b>	<b>0.0224</b>	<b>0.0000</b>	<b>73.3015</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.5 Paving - 2019****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	4.0400e-003	3.3300e-003	0.0315	7.0000e-005	6.8000e-003	5.0000e-005	6.8500e-003	1.8100e-003	5.0000e-005	1.8600e-003	0.0000	6.5012	6.5012	2.6000e-004	0.0000	6.5076
<b>Total</b>	<b>4.0400e-003</b>	<b>3.3300e-003</b>	<b>0.0315</b>	<b>7.0000e-005</b>	<b>6.8000e-003</b>	<b>5.0000e-005</b>	<b>6.8500e-003</b>	<b>1.8100e-003</b>	<b>5.0000e-005</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>6.5012</b>	<b>6.5012</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>6.5076</b>

**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	0.0191	0.3954	0.5887	8.2000e-004		3.4200e-003	3.4200e-003		3.4200e-003	3.4200e-003	0.0000	72.7420	72.7420	0.0224	0.0000	73.3014
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0191</b>	<b>0.3954</b>	<b>0.5887</b>	<b>8.2000e-004</b>		<b>3.4200e-003</b>	<b>3.4200e-003</b>		<b>3.4200e-003</b>	<b>3.4200e-003</b>	<b>0.0000</b>	<b>72.7420</b>	<b>72.7420</b>	<b>0.0224</b>	<b>0.0000</b>	<b>73.3014</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.5 Paving - 2019****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	4.0400e-003	3.3300e-003	0.0315	7.0000e-005	6.8000e-003	5.0000e-005	6.8500e-003	1.8100e-003	5.0000e-005	1.8600e-003	0.0000	6.5012	6.5012	2.6000e-004	0.0000	6.5076
<b>Total</b>	<b>4.0400e-003</b>	<b>3.3300e-003</b>	<b>0.0315</b>	<b>7.0000e-005</b>	<b>6.8000e-003</b>	<b>5.0000e-005</b>	<b>6.8500e-003</b>	<b>1.8100e-003</b>	<b>5.0000e-005</b>	<b>1.8600e-003</b>	<b>0.0000</b>	<b>6.5012</b>	<b>6.5012</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>6.5076</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0195	0.1947	0.2027	3.1000e-004		0.0107	0.0107		9.9100e-003	9.9100e-003	0.0000	27.0138	27.0138	8.4900e-003	0.0000	27.2260
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0195</b>	<b>0.1947</b>	<b>0.2027</b>	<b>3.1000e-004</b>		<b>0.0107</b>	<b>0.0107</b>		<b>9.9100e-003</b>	<b>9.9100e-003</b>	<b>0.0000</b>	<b>27.0138</b>	<b>27.0138</b>	<b>8.4900e-003</b>	<b>0.0000</b>	<b>27.2260</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.5 Paving - 2020****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	1.1000e-003	0.0105	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.3880	2.3880	8.0000e-005	0.0000	2.3901
<b>Total</b>	<b>1.3700e-003</b>	<b>1.1000e-003</b>	<b>0.0105</b>	<b>3.0000e-005</b>	<b>2.5800e-003</b>	<b>2.0000e-005</b>	<b>2.6000e-003</b>	<b>6.9000e-004</b>	<b>2.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>2.3880</b>	<b>2.3880</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.3901</b>

**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	7.2400e-003	0.1500	0.2233	3.1000e-004		1.3000e-003	1.3000e-003		1.3000e-003	1.3000e-003	0.0000	27.0138	27.0138	8.4900e-003	0.0000	27.2260
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>7.2400e-003</b>	<b>0.1500</b>	<b>0.2233</b>	<b>3.1000e-004</b>		<b>1.3000e-003</b>	<b>1.3000e-003</b>		<b>1.3000e-003</b>	<b>1.3000e-003</b>	<b>0.0000</b>	<b>27.0138</b>	<b>27.0138</b>	<b>8.4900e-003</b>	<b>0.0000</b>	<b>27.2260</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.5 Paving - 2020****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	1.3700e-003	1.1000e-003	0.0105	3.0000e-005	2.5800e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.0000e-004	0.0000	2.3880	2.3880	8.0000e-005	0.0000	2.3901
<b>Total</b>	<b>1.3700e-003</b>	<b>1.1000e-003</b>	<b>0.0105</b>	<b>3.0000e-005</b>	<b>2.5800e-003</b>	<b>2.0000e-005</b>	<b>2.6000e-003</b>	<b>6.9000e-004</b>	<b>2.0000e-005</b>	<b>7.0000e-004</b>	<b>0.0000</b>	<b>2.3880</b>	<b>2.3880</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>2.3901</b>

**3.6 Architectural Coating - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1493					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.4600e-003	0.0514	0.0516	8.0000e-005		3.6100e-003	3.6100e-003		3.6100e-003	3.6100e-003	0.0000	7.1491	7.1491	6.0000e-004	0.0000	7.1642
<b>Total</b>	<b>0.1568</b>	<b>0.0514</b>	<b>0.0516</b>	<b>8.0000e-005</b>		<b>3.6100e-003</b>	<b>3.6100e-003</b>		<b>3.6100e-003</b>	<b>3.6100e-003</b>	<b>0.0000</b>	<b>7.1491</b>	<b>7.1491</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>7.1642</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.6 Architectural Coating - 2019****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	6.7700e-003	5.5700e-003	0.0528	1.2000e-004	0.0114	9.0000e-005	0.0115	3.0300e-003	8.0000e-005	3.1100e-003	0.0000	10.8801	10.8801	4.3000e-004	0.0000	10.8908
<b>Total</b>	<b>6.7700e-003</b>	<b>5.5700e-003</b>	<b>0.0528</b>	<b>1.2000e-004</b>	<b>0.0114</b>	<b>9.0000e-005</b>	<b>0.0115</b>	<b>3.0300e-003</b>	<b>8.0000e-005</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>10.8801</b>	<b>10.8801</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>10.8908</b>

**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	0.1493					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6600e-003	0.0380	0.0513	8.0000e-005		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	7.1491	7.1491	6.0000e-004	0.0000	7.1642
<b>Total</b>	<b>0.1510</b>	<b>0.0380</b>	<b>0.0513</b>	<b>8.0000e-005</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>		<b>4.0000e-004</b>	<b>4.0000e-004</b>	<b>0.0000</b>	<b>7.1491</b>	<b>7.1491</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>7.1642</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.6 Architectural Coating - 2019****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	6.7700e-003	5.5700e-003	0.0528	1.2000e-004	0.0114	9.0000e-005	0.0115	3.0300e-003	8.0000e-005	3.1100e-003	0.0000	10.8801	10.8801	4.3000e-004	0.0000	10.8908
<b>Total</b>	<b>6.7700e-003</b>	<b>5.5700e-003</b>	<b>0.0528</b>	<b>1.2000e-004</b>	<b>0.0114</b>	<b>9.0000e-005</b>	<b>0.0115</b>	<b>3.0300e-003</b>	<b>8.0000e-005</b>	<b>3.1100e-003</b>	<b>0.0000</b>	<b>10.8801</b>	<b>10.8801</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>10.8908</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2100e-003	0.0362	0.0394	6.0000e-005		2.3900e-003	2.3900e-003		2.3900e-003	2.3900e-003	0.0000	5.4895	5.4895	4.3000e-004	0.0000	5.5001
<b>Total</b>	<b>0.1198</b>	<b>0.0362</b>	<b>0.0394</b>	<b>6.0000e-005</b>		<b>2.3900e-003</b>	<b>2.3900e-003</b>		<b>2.3900e-003</b>	<b>2.3900e-003</b>	<b>0.0000</b>	<b>5.4895</b>	<b>5.4895</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>5.5001</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.6 Architectural Coating - 2020****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	4.6500e-003	3.7300e-003	0.0355	9.0000e-005	8.7400e-003	7.0000e-005	8.8000e-003	2.3300e-003	6.0000e-005	2.3900e-003	0.0000	8.0904	8.0904	2.8000e-004	0.0000	8.0974
<b>Total</b>	<b>4.6500e-003</b>	<b>3.7300e-003</b>	<b>0.0355</b>	<b>9.0000e-005</b>	<b>8.7400e-003</b>	<b>7.0000e-005</b>	<b>8.8000e-003</b>	<b>2.3300e-003</b>	<b>6.0000e-005</b>	<b>2.3900e-003</b>	<b>0.0000</b>	<b>8.0904</b>	<b>8.0904</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>8.0974</b>

**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	0.1146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2800e-003	0.0292	0.0394	6.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	5.4895	5.4895	4.3000e-004	0.0000	5.5001
<b>Total</b>	<b>0.1159</b>	<b>0.0292</b>	<b>0.0394</b>	<b>6.0000e-005</b>		<b>3.1000e-004</b>	<b>3.1000e-004</b>		<b>3.1000e-004</b>	<b>3.1000e-004</b>	<b>0.0000</b>	<b>5.4895</b>	<b>5.4895</b>	<b>4.3000e-004</b>	<b>0.0000</b>	<b>5.5001</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.6 Architectural Coating - 2020****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	4.6500e-003	3.7300e-003	0.0355	9.0000e-005	8.7400e-003	7.0000e-005	8.8000e-003	2.3300e-003	6.0000e-005	2.3900e-003	0.0000	8.0904	8.0904	2.8000e-004	0.0000	8.0974
<b>Total</b>	<b>4.6500e-003</b>	<b>3.7300e-003</b>	<b>0.0355</b>	<b>9.0000e-005</b>	<b>8.7400e-003</b>	<b>7.0000e-005</b>	<b>8.8000e-003</b>	<b>2.3300e-003</b>	<b>6.0000e-005</b>	<b>2.3900e-003</b>	<b>0.0000</b>	<b>8.0904</b>	<b>8.0904</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>8.0974</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

	ROG	NOx	CO	SO2	Fugitive 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	0.5401	4.7424	5.0864	0.0240	1.5632	0.0179	1.5811	0.4205	0.0168	0.4373	0.0000	2,224.3100	2,224.3100	0.1305	0.0000	2,227.5730
Unmitigated	0.5401	4.7424	5.0864	0.0240	1.5632	0.0179	1.5811	0.4205	0.0168	0.4373	0.0000	2,224.3100	2,224.3100	0.1305	0.0000	2,227.5730

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165
Total	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165

## 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
Arena	9.50	7.30	7.30	81.00	0.00	19.00	100	0	0
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	19.00	19.40	61.60	72	28	0

## 4.4 Fleet Mix

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.6946	0.6946	3.0000e-005	1.0000e-005	0.6973
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.6946	0.6946	3.0000e-005	1.0000e-005	0.6973
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	22.6981	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2200e-003</b>

**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					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	22.6981	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2200e-003</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2387.72	0.6946	3.0000e-005	1.0000e-005	0.6973
<b>Total</b>		<b>0.6946</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6973</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2387.72	0.6946	3.0000e-005	1.0000e-005	0.6973
<b>Total</b>		<b>0.6946</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6973</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	0.1444	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Unmitigated	0.1444	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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	0.0264					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
<b>Total</b>	<b>0.1444</b>	<b>1.4000e-004</b>	<b>0.0159</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0309</b>	<b>0.0309</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0329</b>

**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	0.0264					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4600e-003	1.4000e-004	0.0159	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
<b>Total</b>	<b>0.1444</b>	<b>1.4000e-004</b>	<b>0.0159</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0309</b>	<b>0.0309</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0329</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.0780	0.4330	0.0104	39.0011
Unmitigated	35.6222	0.6151	0.0148	55.3993

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	18.834 / 0	35.6222	0.6151	0.0148	55.3993
<b>Total</b>		<b>35.6222</b>	<b>0.6151</b>	<b>0.0148</b>	<b>55.3993</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	13.2591 / 0	25.0780	0.4330	0.0104	39.0011
<b>Total</b>		<b>25.0780</b>	<b>0.4330</b>	<b>0.0104</b>	<b>39.0011</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7735	0.6958	0.0000	29.1683
Unmitigated	11.7735	0.6958	0.0000	29.1683

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	58	11.7735	0.6958	0.0000	29.1683
<b>Total</b>		<b>11.7735</b>	<b>0.6958</b>	<b>0.0000</b>	<b>29.1683</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	58	11.7735	0.6958	0.0000	29.1683
<b>Total</b>		<b>11.7735</b>	<b>0.6958</b>	<b>0.0000</b>	<b>29.1683</b>

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	99.00
tblConstructionPhase	NumDays	230.00	142.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	5.00	8.00
tblConstructionPhase	PhaseEndDate	7/23/2020	2/28/2020
tblConstructionPhase	PhaseEndDate	6/3/2020	2/14/2020
tblConstructionPhase	PhaseEndDate	7/17/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	6/29/2020	2/15/2020
tblConstructionPhase	PhaseEndDate	7/5/2019	7/10/2019

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblConstructionPhase	PhaseStartDate	6/30/2020	10/15/2019
tblConstructionPhase	PhaseStartDate	7/18/2019	8/1/2019
tblConstructionPhase	PhaseStartDate	7/6/2019	7/11/2019
tblConstructionPhase	PhaseStartDate	6/4/2020	9/1/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	7.50	4.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	81.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	72.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

## 2.1 Overall Construction (Maximum Daily Emission)

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	11.6479	50.3435	48.6802	0.1099	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,941.3063	10,941.3063	1.6063	0.0000	10,981.4651
2020	10.9947	46.0082	46.1792	0.1087	3.4350	1.9669	5.4019	0.9268	1.8453	2.7721	0.0000	10,746.4376	10,746.4376	1.5546	0.0000	10,785.3025
Maximum	11.6479	50.3435	48.6802	0.1099	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,941.3063	10,941.3063	1.6063	0.0000	10,981.4651

### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	8.9246	39.3407	50.6006	0.1099	8.2777	0.3559	8.4207	4.5080	0.3497	4.6510	0.0000	10,941.3063	10,941.3063	1.6063	0.0000	10,981.4651
2020	8.6212	38.0087	48.4555	0.1087	3.4350	0.3165	3.7515	0.9268	0.3120	1.2388	0.0000	10,746.4376	10,746.4376	1.5546	0.0000	10,785.3025
Maximum	8.9246	39.3407	50.6006	0.1099	8.2777	0.3559	8.4207	4.5080	0.3497	4.6510	0.0000	10,941.3063	10,941.3063	1.6063	0.0000	10,981.4651

	ROG	NOx	CO	SO2	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	22.51	19.72	-4.42	0.00	45.90	84.57	53.20	50.12	83.64	60.58	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	3.8768	25.7588	30.9694	0.1406	9.0184	0.0980	9.1164	2.4157	0.0920	2.5077		14,346.8268	14,346.8268	0.7750		14,366.2025
<b>Total</b>	<b>4.6761</b>	<b>25.7604</b>	<b>31.1456</b>	<b>0.1406</b>	<b>9.0184</b>	<b>0.0987</b>	<b>9.1171</b>	<b>2.4157</b>	<b>0.0926</b>	<b>2.5083</b>		<b>14,347.2127</b>	<b>14,347.2127</b>	<b>0.7760</b>	<b>0.0000</b>	<b>14,366.6131</b>

**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	lb/day										lb/day					
Area	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	3.8768	25.7588	30.9694	0.1406	9.0184	0.0980	9.1164	2.4157	0.0920	2.5077		14,346.8268	14,346.8268	0.7750		14,366.2025
<b>Total</b>	<b>4.6761</b>	<b>25.7604</b>	<b>31.1456</b>	<b>0.1406</b>	<b>9.0184</b>	<b>0.0987</b>	<b>9.1171</b>	<b>2.4157</b>	<b>0.0926</b>	<b>2.5083</b>		<b>14,347.2127</b>	<b>14,347.2127</b>	<b>0.7760</b>	<b>0.0000</b>	<b>14,366.6131</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

	ROG	NOx	CO	SO2	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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/10/2019	5	8	
2	Grading	Grading	7/11/2019	7/31/2019	5	15	
3	Building Construction	Building Construction	8/1/2019	2/14/2020	5	142	
4	Paving	Paving	9/1/2019	2/15/2020	5	120	
5	Architectural Coating	Architectural Coating	10/15/2019	2/28/2020	5	99	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 4.18

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 29,739; Non-Residential Outdoor: 9,913; Striped Parking Area: 36,270 (Architectural Coating – sqft)

#### OffRoad Equipment

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	262.00	102.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3049	0.0000	6.3049	3.3408	0.0000	3.3408			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>6.3049</b>	<b>1.3974</b>	<b>7.7023</b>	<b>3.3408</b>	<b>1.2856</b>	<b>4.6263</b>		<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0843	0.0534	0.6462	1.3900e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		137.8907	137.8907	5.5500e-003		138.0295
<b>Total</b>	<b>0.0843</b>	<b>0.0534</b>	<b>0.6462</b>	<b>1.3900e-003</b>	<b>0.1232</b>	<b>9.1000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.4000e-004</b>	<b>0.0335</b>		<b>137.8907</b>	<b>137.8907</b>	<b>5.5500e-003</b>		<b>138.0295</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8372	0.0000	2.8372	1.5033	0.0000	1.5033			0.0000			0.0000
Off-Road	0.7263	14.8397	18.9906	0.0297		0.1133	0.1133		0.1133	0.1133	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>0.7263</b>	<b>14.8397</b>	<b>18.9906</b>	<b>0.0297</b>	<b>2.8372</b>	<b>0.1133</b>	<b>2.9505</b>	<b>1.5033</b>	<b>0.1133</b>	<b>1.6167</b>	<b>0.0000</b>	<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0843	0.0534	0.6462	1.3900e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		137.8907	137.8907	5.5500e-003		138.0295
<b>Total</b>	<b>0.0843</b>	<b>0.0534</b>	<b>0.6462</b>	<b>1.3900e-003</b>	<b>0.1232</b>	<b>9.1000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.4000e-004</b>	<b>0.0335</b>		<b>137.8907</b>	<b>137.8907</b>	<b>5.5500e-003</b>		<b>138.0295</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5431	13.4790	2.9741	0.0302	0.6913	0.1071	0.7984	0.1990	0.1025	0.3015		3,154.592 4	3,154.592 4	0.2606		3,161.106 2
Worker	1.4728	0.9334	11.2864	0.0242	2.1523	0.0159	2.1682	0.5709	0.0147	0.5855		2,408.491 2	2,408.491 2	0.0970		2,410.915 0
<b>Total</b>	<b>2.0159</b>	<b>14.4124</b>	<b>14.2605</b>	<b>0.0544</b>	<b>2.8435</b>	<b>0.1230</b>	<b>2.9665</b>	<b>0.7699</b>	<b>0.1171</b>	<b>0.8871</b>		<b>5,563.083 6</b>	<b>5,563.083 6</b>	<b>0.3575</b>		<b>5,572.021 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5431	13.4790	2.9741	0.0302	0.6913	0.1071	0.7984	0.1990	0.1025	0.3015		3,154.592 4	3,154.592 4	0.2606		3,161.106 2
Worker	1.4728	0.9334	11.2864	0.0242	2.1523	0.0159	2.1682	0.5709	0.0147	0.5855		2,408.491 2	2,408.491 2	0.0970		2,410.915 0
<b>Total</b>	<b>2.0159</b>	<b>14.4124</b>	<b>14.2605</b>	<b>0.0544</b>	<b>2.8435</b>	<b>0.1230</b>	<b>2.9665</b>	<b>0.7699</b>	<b>0.1171</b>	<b>0.8871</b>		<b>5,563.083 6</b>	<b>5,563.083 6</b>	<b>0.3575</b>		<b>5,572.021 2</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4383	12.2981	2.5689	0.0300	0.6913	0.0685	0.7598	0.1990	0.0655	0.2646		3,133.575 9	3,133.575 9	0.2376		3,139.514 7
Worker	1.3169	0.8148	9.9216	0.0235	2.1523	0.0153	2.1676	0.5709	0.0141	0.5850		2,332.618 6	2,332.618 6	0.0826		2,334.684 7
<b>Total</b>	<b>1.7552</b>	<b>13.1130</b>	<b>12.4905</b>	<b>0.0534</b>	<b>2.8435</b>	<b>0.0838</b>	<b>2.9274</b>	<b>0.7699</b>	<b>0.0796</b>	<b>0.8496</b>		<b>5,466.194 5</b>	<b>5,466.194 5</b>	<b>0.3202</b>		<b>5,474.199 5</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4383	12.2981	2.5689	0.0300	0.6913	0.0685	0.7598	0.1990	0.0655	0.2646		3,133.575 9	3,133.575 9	0.2376		3,139.514 7
Worker	1.3169	0.8148	9.9216	0.0235	2.1523	0.0153	2.1676	0.5709	0.0141	0.5850		2,332.618 6	2,332.618 6	0.0826		2,334.684 7
<b>Total</b>	<b>1.7552</b>	<b>13.1130</b>	<b>12.4905</b>	<b>0.0534</b>	<b>2.8435</b>	<b>0.0838</b>	<b>2.9274</b>	<b>0.7699</b>	<b>0.0796</b>	<b>0.8496</b>		<b>5,466.194 5</b>	<b>5,466.194 5</b>	<b>0.3202</b>		<b>5,474.199 5</b>

**3.5 Paving - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.319 1	1,843.319 1	0.5671		1,857.496 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2679</b>	<b>12.7604</b>	<b>12.3130</b>	<b>0.0189</b>		<b>0.7196</b>	<b>0.7196</b>		<b>0.6637</b>	<b>0.6637</b>		<b>1,843.319 1</b>	<b>1,843.319 1</b>	<b>0.5671</b>		<b>1,857.496 6</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.5 Paving - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4389	9.0888	13.5323	0.0189		0.0787	0.0787		0.0787	0.0787	0.0000	1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.4389</b>	<b>9.0888</b>	<b>13.5323</b>	<b>0.0189</b>		<b>0.0787</b>	<b>0.0787</b>		<b>0.0787</b>	<b>0.0787</b>	<b>0.0000</b>	<b>1,843.3191</b>	<b>1,843.3191</b>	<b>0.5671</b>		<b>1,857.4966</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.5 Paving - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1124	0.0713	0.8616	1.8500e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		183.8543	183.8543	7.4000e-003		184.0393
<b>Total</b>	<b>0.1124</b>	<b>0.0713</b>	<b>0.8616</b>	<b>1.8500e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>183.8543</b>	<b>183.8543</b>	<b>7.4000e-003</b>		<b>184.0393</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1837</b>	<b>11.8015</b>	<b>12.2823</b>	<b>0.0189</b>		<b>0.6509</b>	<b>0.6509</b>		<b>0.6005</b>	<b>0.6005</b>		<b>1,804.7070</b>	<b>1,804.7070</b>	<b>0.5670</b>		<b>1,818.8830</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1005	0.0622	0.7574	1.7900e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		178.0625	178.0625	6.3100e-003		178.2202
<b>Total</b>	<b>0.1005</b>	<b>0.0622</b>	<b>0.7574</b>	<b>1.7900e-003</b>	<b>0.1643</b>	<b>1.1700e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.0800e-003</b>	<b>0.0447</b>		<b>178.0625</b>	<b>178.0625</b>	<b>6.3100e-003</b>		<b>178.2202</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4389	9.0888	13.5323	0.0189		0.0787	0.0787		0.0787	0.0787	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.4389</b>	<b>9.0888</b>	<b>13.5323</b>	<b>0.0189</b>		<b>0.0787</b>	<b>0.0787</b>		<b>0.0787</b>	<b>0.0787</b>	<b>0.0000</b>	<b>1,804.7070</b>	<b>1,804.7070</b>	<b>0.5670</b>		<b>1,818.8830</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1005	0.0622	0.7574	1.7900e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		178.0625	178.0625	6.3100e-003		178.2202
<b>Total</b>	<b>0.1005</b>	<b>0.0622</b>	<b>0.7574</b>	<b>1.7900e-003</b>	<b>0.1643</b>	<b>1.1700e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.0800e-003</b>	<b>0.0447</b>		<b>178.0625</b>	<b>178.0625</b>	<b>6.3100e-003</b>		<b>178.2202</b>

**3.6 Architectural Coating - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>5.5982</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.6 Architectural Coating - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2923	0.1853	2.2400	4.8100e-003	0.4272	3.1500e-003	0.4303	0.1133	2.9100e-003	0.1162		478.0212	478.0212	0.0192		478.5022
<b>Total</b>	<b>0.2923</b>	<b>0.1853</b>	<b>2.2400</b>	<b>4.8100e-003</b>	<b>0.4272</b>	<b>3.1500e-003</b>	<b>0.4303</b>	<b>0.1133</b>	<b>2.9100e-003</b>	<b>0.1162</b>		<b>478.0212</b>	<b>478.0212</b>	<b>0.0192</b>		<b>478.5022</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>5.3912</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.6 Architectural Coating - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2923	0.1853	2.2400	4.8100e-003	0.4272	3.1500e-003	0.4303	0.1133	2.9100e-003	0.1162		478.0212	478.0212	0.0192		478.5022
<b>Total</b>	<b>0.2923</b>	<b>0.1853</b>	<b>2.2400</b>	<b>4.8100e-003</b>	<b>0.4272</b>	<b>3.1500e-003</b>	<b>0.4303</b>	<b>0.1133</b>	<b>2.9100e-003</b>	<b>0.1162</b>		<b>478.0212</b>	<b>478.0212</b>	<b>0.0192</b>		<b>478.5022</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>5.5740</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2614	0.1617	1.9692	4.6500e-003	0.4272	3.0400e-003	0.4302	0.1133	2.8000e-003	0.1161		462.9625	462.9625	0.0164		463.3725
<b>Total</b>	<b>0.2614</b>	<b>0.1617</b>	<b>1.9692</b>	<b>4.6500e-003</b>	<b>0.4272</b>	<b>3.0400e-003</b>	<b>0.4302</b>	<b>0.1133</b>	<b>2.8000e-003</b>	<b>0.1161</b>		<b>462.9625</b>	<b>462.9625</b>	<b>0.0164</b>		<b>463.3725</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>5.3912</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2614	0.1617	1.9692	4.6500e-003	0.4272	3.0400e-003	0.4302	0.1133	2.8000e-003	0.1161		462.9625	462.9625	0.0164		463.3725
<b>Total</b>	<b>0.2614</b>	<b>0.1617</b>	<b>1.9692</b>	<b>4.6500e-003</b>	<b>0.4272</b>	<b>3.0400e-003</b>	<b>0.4302</b>	<b>0.1133</b>	<b>2.8000e-003</b>	<b>0.1161</b>		<b>462.9625</b>	<b>462.9625</b>	<b>0.0164</b>		<b>463.3725</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.8768	25.7588	30.9694	0.1406	9.0184	0.0980	9.1164	2.4157	0.0920	2.5077		14,346.8268	14,346.8268	0.7750		14,366.2025
Unmitigated	3.8768	25.7588	30.9694	0.1406	9.0184	0.0980	9.1164	2.4157	0.0920	2.5077		14,346.8268	14,346.8268	0.7750		14,366.2025

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165
Total	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165

## 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
Arena	9.50	7.30	7.30	81.00	0.00	19.00	100	0	0
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	19.00	19.40	61.60	72	28	0

## 4.4 Fleet Mix

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
NaturalGas Unmitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	0.0621865	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	6.21865e-005	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Unmitigated	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0162	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
<b>Total</b>	<b>0.7992</b>	<b>1.6000e-003</b>	<b>0.1762</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4032</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0162	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
<b>Total</b>	<b>0.7992</b>	<b>1.6000e-003</b>	<b>0.1762</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4032</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**9.0 Operational Offroad**

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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**

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2025
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	18.00	99.00
tblConstructionPhase	NumDays	230.00	142.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	5.00	8.00
tblConstructionPhase	PhaseEndDate	7/23/2020	2/28/2020
tblConstructionPhase	PhaseEndDate	6/3/2020	2/14/2020
tblConstructionPhase	PhaseEndDate	7/17/2019	7/31/2019
tblConstructionPhase	PhaseEndDate	6/29/2020	2/15/2020
tblConstructionPhase	PhaseEndDate	7/5/2019	7/10/2019

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblConstructionPhase	PhaseStartDate	6/30/2020	10/15/2019
tblConstructionPhase	PhaseStartDate	7/18/2019	8/1/2019
tblConstructionPhase	PhaseStartDate	7/6/2019	7/11/2019
tblConstructionPhase	PhaseStartDate	6/4/2020	9/1/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblGrading	AcresOfGrading	7.50	4.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2025
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	19.40
tblVehicleTrips	CNW_TTP	0.00	61.60
tblVehicleTrips	CW_TTP	0.00	81.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblVehicleTrips	CW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	PR_TP	0.00	72.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98
tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	11.4367	50.8738	47.0128	0.1048	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,430.85 77	10,430.85 77	1.6223	0.0000	10,471.41 42
2020	10.8083	46.4386	44.6436	0.1037	3.4350	1.9685	5.4035	0.9268	1.8468	2.7737	0.0000	10,247.92 09	10,247.92 09	1.5704	0.0000	10,287.18 07
Maximum	11.4367	50.8738	47.0128	0.1048	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	10,430.85 77	10,430.85 77	1.6223	0.0000	10,471.41 42

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	8.7134	39.8711	48.9332	0.1048	8.2777	0.3580	8.4207	4.5080	0.3517	4.6510	0.0000	10,430.85 77	10,430.85 77	1.6223	0.0000	10,471.41 42
2020	8.4348	38.4391	46.9199	0.1037	3.4350	0.3181	3.7531	0.9268	0.3135	1.2403	0.0000	10,247.92 09	10,247.92 09	1.5704	0.0000	10,287.18 07
Maximum	8.7134	39.8711	48.9332	0.1048	8.2777	0.3580	8.4207	4.5080	0.3517	4.6510	0.0000	10,430.85 77	10,430.85 77	1.6223	0.0000	10,471.41 42

	ROG	NOx	CO	SO2	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	22.91	19.53	-4.58	0.00	45.90	84.49	53.19	50.12	83.56	60.58	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	2.8183	26.1936	29.1206	0.1281	9.0184	0.0988	9.1172	2.4157	0.0927	2.5084		13,088.1199	13,088.1199	0.8357		13,109.0129
<b>Total</b>	<b>3.6176</b>	<b>26.1952</b>	<b>29.2968</b>	<b>0.1281</b>	<b>9.0184</b>	<b>0.0994</b>	<b>9.1178</b>	<b>2.4157</b>	<b>0.0933</b>	<b>2.5090</b>		<b>13,088.5058</b>	<b>13,088.5058</b>	<b>0.8367</b>	<b>0.0000</b>	<b>13,109.4235</b>

**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	lb/day										lb/day					
Area	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	2.8183	26.1936	29.1206	0.1281	9.0184	0.0988	9.1172	2.4157	0.0927	2.5084		13,088.1199	13,088.1199	0.8357		13,109.0129
<b>Total</b>	<b>3.6176</b>	<b>26.1952</b>	<b>29.2968</b>	<b>0.1281</b>	<b>9.0184</b>	<b>0.0994</b>	<b>9.1178</b>	<b>2.4157</b>	<b>0.0933</b>	<b>2.5090</b>		<b>13,088.5058</b>	<b>13,088.5058</b>	<b>0.8367</b>	<b>0.0000</b>	<b>13,109.4235</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

	ROG	NOx	CO	SO2	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

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/10/2019	5	8	
2	Grading	Grading	7/11/2019	7/31/2019	5	15	
3	Building Construction	Building Construction	8/1/2019	2/14/2020	5	142	
4	Paving	Paving	9/1/2019	2/15/2020	5	120	
5	Architectural Coating	Architectural Coating	10/15/2019	2/28/2020	5	99	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 4.18

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 29,739; Non-Residential Outdoor: 9,913; Striped Parking Area: 36,270 (Architectural Coating – sqft)

#### OffRoad Equipment



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	262.00	102.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	52.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.1 Mitigation Measures Construction**

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.1419	0.1419		0.1419	0.1419	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>0.9312</b>	<b>19.0656</b>	<b>22.9600</b>	<b>0.0380</b>	<b>8.1298</b>	<b>0.1419</b>	<b>8.2717</b>	<b>4.4688</b>	<b>0.1419</b>	<b>4.6107</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**3.3 Grading - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3049	0.0000	6.3049	3.3408	0.0000	3.3408			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>6.3049</b>	<b>1.3974</b>	<b>7.7023</b>	<b>3.3408</b>	<b>1.2856</b>	<b>4.6263</b>		<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0738	0.0640	0.5479	1.2000e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		119.5820	119.5820	4.8100e-003		119.7024
<b>Total</b>	<b>0.0738</b>	<b>0.0640</b>	<b>0.5479</b>	<b>1.2000e-003</b>	<b>0.1232</b>	<b>9.1000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.4000e-004</b>	<b>0.0335</b>		<b>119.5820</b>	<b>119.5820</b>	<b>4.8100e-003</b>		<b>119.7024</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.8372	0.0000	2.8372	1.5033	0.0000	1.5033			0.0000			0.0000
Off-Road	0.7263	14.8397	18.9906	0.0297		0.1133	0.1133		0.1133	0.1133	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>0.7263</b>	<b>14.8397</b>	<b>18.9906</b>	<b>0.0297</b>	<b>2.8372</b>	<b>0.1133</b>	<b>2.9505</b>	<b>1.5033</b>	<b>0.1133</b>	<b>1.6167</b>	<b>0.0000</b>	<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.3 Grading - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0738	0.0640	0.5479	1.2000e-003	0.1232	9.1000e-004	0.1241	0.0327	8.4000e-004	0.0335		119.5820	119.5820	4.8100e-003		119.7024
<b>Total</b>	<b>0.0738</b>	<b>0.0640</b>	<b>0.5479</b>	<b>1.2000e-003</b>	<b>0.1232</b>	<b>9.1000e-004</b>	<b>0.1241</b>	<b>0.0327</b>	<b>8.4000e-004</b>	<b>0.0335</b>		<b>119.5820</b>	<b>119.5820</b>	<b>4.8100e-003</b>		<b>119.7024</b>

**3.4 Building Construction - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
<b>Total</b>	<b>2.3612</b>	<b>21.0788</b>	<b>17.1638</b>	<b>0.0269</b>		<b>1.2899</b>	<b>1.2899</b>		<b>1.2127</b>	<b>1.2127</b>		<b>2,591.5802</b>	<b>2,591.5802</b>	<b>0.6313</b>		<b>2,607.3635</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5668	13.7750	3.4947	0.0292	0.6913	0.1092	0.8005	0.1990	0.1045	0.3035		3,051.817 0	3,051.817 0	0.2929		3,059.138 3
Worker	1.2885	1.1173	9.5701	0.0210	2.1523	0.0159	2.1682	0.5709	0.0147	0.5855		2,088.699 6	2,088.699 6	0.0841		2,090.801 9
<b>Total</b>	<b>1.8553</b>	<b>14.8922</b>	<b>13.0648</b>	<b>0.0502</b>	<b>2.8435</b>	<b>0.1251</b>	<b>2.9686</b>	<b>0.7699</b>	<b>0.1192</b>	<b>0.8891</b>		<b>5,140.516 6</b>	<b>5,140.516 6</b>	<b>0.3769</b>		<b>5,149.940 2</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,591.580 2</b>	<b>2,591.580 2</b>	<b>0.6313</b>		<b>2,607.363 5</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.4 Building Construction - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5668	13.7750	3.4947	0.0292	0.6913	0.1092	0.8005	0.1990	0.1045	0.3035		3,051.817 0	3,051.817 0	0.2929		3,059.138 3
Worker	1.2885	1.1173	9.5701	0.0210	2.1523	0.0159	2.1682	0.5709	0.0147	0.5855		2,088.699 6	2,088.699 6	0.0841		2,090.801 9
<b>Total</b>	<b>1.8553</b>	<b>14.8922</b>	<b>13.0648</b>	<b>0.0502</b>	<b>2.8435</b>	<b>0.1251</b>	<b>2.9686</b>	<b>0.7699</b>	<b>0.1192</b>	<b>0.8891</b>		<b>5,140.516 6</b>	<b>5,140.516 6</b>	<b>0.3769</b>		<b>5,149.940 2</b>

**3.4 Building Construction - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.063 1	2,553.063 1	0.6229		2,568.634 5
<b>Total</b>	<b>2.1198</b>	<b>19.1860</b>	<b>16.8485</b>	<b>0.0269</b>		<b>1.1171</b>	<b>1.1171</b>		<b>1.0503</b>	<b>1.0503</b>		<b>2,553.063 1</b>	<b>2,553.063 1</b>	<b>0.6229</b>		<b>2,568.634 5</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4601	12.5260	3.0467	0.0290	0.6913	0.0701	0.7614	0.1990	0.0671	0.2661		3,030.2318	3,030.2318	0.2681		3,036.9346
Worker	1.1537	0.9737	8.3422	0.0203	2.1523	0.0153	2.1676	0.5709	0.0141	0.5850		2,022.6329	2,022.6329	0.0711		2,024.4096
<b>Total</b>	<b>1.6137</b>	<b>13.4997</b>	<b>11.3889</b>	<b>0.0493</b>	<b>2.8435</b>	<b>0.0854</b>	<b>2.9290</b>	<b>0.7699</b>	<b>0.0812</b>	<b>0.8511</b>		<b>5,052.8647</b>	<b>5,052.8647</b>	<b>0.3392</b>		<b>5,061.3441</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.1355	0.1355		0.1355	0.1355	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
<b>Total</b>	<b>0.6739</b>	<b>14.2261</b>	<b>17.8738</b>	<b>0.0269</b>		<b>0.1355</b>	<b>0.1355</b>		<b>0.1355</b>	<b>0.1355</b>	<b>0.0000</b>	<b>2,553.0631</b>	<b>2,553.0631</b>	<b>0.6229</b>		<b>2,568.6345</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.4 Building Construction - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4601	12.5260	3.0467	0.0290	0.6913	0.0701	0.7614	0.1990	0.0671	0.2661		3,030.2318	3,030.2318	0.2681		3,036.9346
Worker	1.1537	0.9737	8.3422	0.0203	2.1523	0.0153	2.1676	0.5709	0.0141	0.5850		2,022.6329	2,022.6329	0.0711		2,024.4096
<b>Total</b>	<b>1.6137</b>	<b>13.4997</b>	<b>11.3889</b>	<b>0.0493</b>	<b>2.8435</b>	<b>0.0854</b>	<b>2.9290</b>	<b>0.7699</b>	<b>0.0812</b>	<b>0.8511</b>		<b>5,052.8647</b>	<b>5,052.8647</b>	<b>0.3392</b>		<b>5,061.3441</b>

**3.5 Paving - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637		1,843.3191	1,843.3191	0.5671		1,857.4966
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.2679</b>	<b>12.7604</b>	<b>12.3130</b>	<b>0.0189</b>		<b>0.7196</b>	<b>0.7196</b>		<b>0.6637</b>	<b>0.6637</b>		<b>1,843.3191</b>	<b>1,843.3191</b>	<b>0.5671</b>		<b>1,857.4966</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.5 Paving - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4389	9.0888	13.5323	0.0189		0.0787	0.0787		0.0787	0.0787	0.0000	1,843.319 1	1,843.319 1	0.5671		1,857.496 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.4389</b>	<b>9.0888</b>	<b>13.5323</b>	<b>0.0189</b>		<b>0.0787</b>	<b>0.0787</b>		<b>0.0787</b>	<b>0.0787</b>	<b>0.0000</b>	<b>1,843.319 1</b>	<b>1,843.319 1</b>	<b>0.5671</b>		<b>1,857.496 6</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.5 Paving - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0984	0.0853	0.7305	1.6000e-003	0.1643	1.2100e-003	0.1655	0.0436	1.1200e-003	0.0447		159.4427	159.4427	6.4200e-003		159.6032
<b>Total</b>	<b>0.0984</b>	<b>0.0853</b>	<b>0.7305</b>	<b>1.6000e-003</b>	<b>0.1643</b>	<b>1.2100e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.1200e-003</b>	<b>0.0447</b>		<b>159.4427</b>	<b>159.4427</b>	<b>6.4200e-003</b>		<b>159.6032</b>

**3.5 Paving - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.1837</b>	<b>11.8015</b>	<b>12.2823</b>	<b>0.0189</b>		<b>0.6509</b>	<b>0.6509</b>		<b>0.6005</b>	<b>0.6005</b>		<b>1,804.7070</b>	<b>1,804.7070</b>	<b>0.5670</b>		<b>1,818.8830</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0881	0.0743	0.6368	1.5500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		154.3995	154.3995	5.4200e-003		154.5351
<b>Total</b>	<b>0.0881</b>	<b>0.0743</b>	<b>0.6368</b>	<b>1.5500e-003</b>	<b>0.1643</b>	<b>1.1700e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.0800e-003</b>	<b>0.0447</b>		<b>154.3995</b>	<b>154.3995</b>	<b>5.4200e-003</b>		<b>154.5351</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4389	9.0888	13.5323	0.0189		0.0787	0.0787		0.0787	0.0787	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.4389</b>	<b>9.0888</b>	<b>13.5323</b>	<b>0.0189</b>		<b>0.0787</b>	<b>0.0787</b>		<b>0.0787</b>	<b>0.0787</b>	<b>0.0000</b>	<b>1,804.7070</b>	<b>1,804.7070</b>	<b>0.5670</b>		<b>1,818.8830</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.5 Paving - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0881	0.0743	0.6368	1.5500e-003	0.1643	1.1700e-003	0.1655	0.0436	1.0800e-003	0.0447		154.3995	154.3995	5.4200e-003		154.5351
<b>Total</b>	<b>0.0881</b>	<b>0.0743</b>	<b>0.6368</b>	<b>1.5500e-003</b>	<b>0.1643</b>	<b>1.1700e-003</b>	<b>0.1655</b>	<b>0.0436</b>	<b>1.0800e-003</b>	<b>0.0447</b>		<b>154.3995</b>	<b>154.3995</b>	<b>5.4200e-003</b>		<b>154.5351</b>

**3.6 Architectural Coating - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>5.5982</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.6 Architectural Coating - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2557	0.2218	1.8994	4.1700e-003	0.4272	3.1500e-003	0.4303	0.1133	2.9100e-003	0.1162		414.5511	414.5511	0.0167		414.9683
<b>Total</b>	<b>0.2557</b>	<b>0.2218</b>	<b>1.8994</b>	<b>4.1700e-003</b>	<b>0.4272</b>	<b>3.1500e-003</b>	<b>0.4303</b>	<b>0.1133</b>	<b>2.9100e-003</b>	<b>0.1162</b>		<b>414.5511</b>	<b>414.5511</b>	<b>0.0167</b>		<b>414.9683</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>5.3912</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.6 Architectural Coating - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2557	0.2218	1.8994	4.1700e-003	0.4272	3.1500e-003	0.4303	0.1133	2.9100e-003	0.1162		414.5511	414.5511	0.0167		414.9683
<b>Total</b>	<b>0.2557</b>	<b>0.2218</b>	<b>1.8994</b>	<b>4.1700e-003</b>	<b>0.4272</b>	<b>3.1500e-003</b>	<b>0.4303</b>	<b>0.1133</b>	<b>2.9100e-003</b>	<b>0.1162</b>		<b>414.5511</b>	<b>414.5511</b>	<b>0.0167</b>		<b>414.9683</b>

**3.6 Architectural Coating - 2020****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>5.5740</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2290	0.1933	1.6557	4.0300e-003	0.4272	3.0400e-003	0.4302	0.1133	2.8000e-003	0.1161		401.4386	401.4386	0.0141		401.7912
<b>Total</b>	<b>0.2290</b>	<b>0.1933</b>	<b>1.6557</b>	<b>4.0300e-003</b>	<b>0.4272</b>	<b>3.0400e-003</b>	<b>0.4302</b>	<b>0.1133</b>	<b>2.8000e-003</b>	<b>0.1161</b>		<b>401.4386</b>	<b>401.4386</b>	<b>0.0141</b>		<b>401.7912</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	5.3318					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0143	0.0143		0.0143	0.0143	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>5.3912</b>	<b>1.3570</b>	<b>1.8324</b>	<b>2.9700e-003</b>		<b>0.0143</b>	<b>0.0143</b>		<b>0.0143</b>	<b>0.0143</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.6 Architectural Coating - 2020****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.2290	0.1933	1.6557	4.0300e-003	0.4272	3.0400e-003	0.4302	0.1133	2.8000e-003	0.1161		401.4386	401.4386	0.0141		401.7912
<b>Total</b>	<b>0.2290</b>	<b>0.1933</b>	<b>1.6557</b>	<b>4.0300e-003</b>	<b>0.4272</b>	<b>3.0400e-003</b>	<b>0.4302</b>	<b>0.1133</b>	<b>2.8000e-003</b>	<b>0.1161</b>		<b>401.4386</b>	<b>401.4386</b>	<b>0.0141</b>		<b>401.7912</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8183	26.1936	29.1206	0.1281	9.0184	0.0988	9.1172	2.4157	0.0927	2.5084		13,088.11 99	13,088.11 99	0.8357		13,109.01 29
Unmitigated	2.8183	26.1936	29.1206	0.1281	9.0184	0.0988	9.1172	2.4157	0.0927	2.5084		13,088.11 99	13,088.11 99	0.8357		13,109.01 29

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165
Total	1,896.99	1,896.99	1,896.99	4,210,165	4,210,165

## 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
Arena	9.50	7.30	7.30	81.00	0.00	19.00	100	0	0
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	19.00	19.40	61.60	72	28	0

## 4.4 Fleet Mix

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
Arena	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036
User Defined Recreational	0.545380	0.030786	0.179742	0.096075	0.023578	0.005330	0.012536	0.096768	0.001298	0.001145	0.005079	0.001245	0.001036

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
NaturalGas Unmitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	0.0621865	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	6.21865e-005	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
Unmitigated	0.7992	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0162	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
<b>Total</b>	<b>0.7992</b>	<b>1.6000e-003</b>	<b>0.1762</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4032</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0162	1.6000e-003	0.1762	1.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004		0.3786	0.3786	9.8000e-004		0.4032
<b>Total</b>	<b>0.7992</b>	<b>1.6000e-003</b>	<b>0.1762</b>	<b>1.0000e-005</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>6.3000e-004</b>	<b>6.3000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4032</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**9.0 Operational Offroad**

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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**

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**Redding Rancheria FTT and Casino Project – Alternative F**  
**Shasta County, Mitigation Report**

**Construction Mitigation Summary**

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.03	0.21	0.00	0.00	0.86	0.86	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.41	0.18	-0.03	0.00	0.82	0.81	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.70	0.48	-0.16	0.00	0.92	0.91	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.60	0.27	-0.09	0.00	0.89	0.88	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.77	0.58	-0.04	0.00	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00

**OFFROAD Equipment Mitigation**

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 3	1	1	Level 3	0.00
Cement and Mortar Mixers	Diesel	Tier 3	2	2	Level 3	0.00
Cranes	Diesel	Tier 3	1	1	Level 3	0.00
Excavators	Diesel	Tier 3	1	1	Level 3	0.00
Forklifts	Diesel	Tier 3	3	3	Level 3	0.00
Generator Sets	Diesel	Tier 3	1	1	Level 3	0.00
Graders	Diesel	Tier 3	1	1	Level 3	0.00
Pavers	Diesel	Tier 3	1	1	Level 3	0.00
Paving Equipment	Diesel	Tier 3	2	2	Level 3	0.00
Rollers	Diesel	Tier 3	2	2	Level 3	0.00
Rubber Tired Dozers	Diesel	Tier 3	4	4	Level 3	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 3	11	11	Level 3	0.00
Welders	Diesel	Tier 3	1	1	Level 3	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Air Compressors	1.26700E-002	8.75900E-002	9.09300E-002	1.50000E-004	5.99000E-003	5.99000E-003	0.00000E+000	1.26386E+001	1.26386E+001	1.03000E-003	0.00000E+000	1.26643E+001
Cement and Mortar Mixers	5.29000E-003	3.31400E-002	2.77500E-002	6.00000E-005	1.29000E-003	1.29000E-003	0.00000E+000	4.12449E+000	4.12449E+000	4.30000E-004	0.00000E+000	4.13519E+000
Cranes	3.05800E-002	3.64300E-001	1.39890E-001	3.60000E-004	1.53500E-002	1.41200E-002	0.00000E+000	3.20301E+001	3.20301E+001	1.01900E-002	0.00000E+000	3.22847E+001
Excavators	1.96000E-003	2.01100E-002	2.44700E-002	4.00000E-005	9.70000E-004	8.90000E-004	0.00000E+000	3.47764E+000	3.47764E+000	1.10000E-003	0.00000E+000	3.50515E+000
Forklifts	3.32800E-002	2.97760E-001	2.53670E-001	3.30000E-004	2.28800E-002	2.10500E-002	0.00000E+000	2.90920E+001	2.90920E+001	9.25000E-003	0.00000E+000	2.93233E+001
Generator Sets	3.07800E-002	2.63290E-001	2.64050E-001	4.70000E-004	1.55500E-002	1.55500E-002	0.00000E+000	4.01297E+001	4.01297E+001	2.48000E-003	0.00000E+000	4.01916E+001
Graders	3.65000E-003	4.93500E-002	1.37900E-002	5.00000E-005	1.58000E-003	1.46000E-003	0.00000E+000	4.47442E+000	4.47442E+000	1.42000E-003	0.00000E+000	4.50981E+000
Pavers	1.68500E-002	1.82290E-001	1.74040E-001	2.80000E-004	8.91000E-003	8.20000E-003	0.00000E+000	2.51845E+001	2.51845E+001	8.02000E-003	0.00000E+000	2.53849E+001
Paving Equipment	1.90300E-002	2.00240E-001	2.27380E-001	3.70000E-004	9.96000E-003	9.16000E-003	0.00000E+000	3.27323E+001	3.27323E+001	1.04200E-002	0.00000E+000	3.29927E+001
Rollers	1.99300E-002	1.97730E-001	1.71310E-001	2.40000E-004	1.29000E-002	1.18600E-002	0.00000E+000	2.10762E+001	2.10762E+001	6.71000E-003	0.00000E+000	2.12439E+001
Rubber Tired Dozers	2.21200E-002	2.35450E-001	8.35400E-002	1.70000E-004	1.14800E-002	1.05600E-002	0.00000E+000	1.49557E+001	1.49557E+001	4.73000E-003	0.00000E+000	1.50740E+001
Tractors/Loaders/Backhoes	6.49300E-002	6.51970E-001	6.54600E-001	8.80000E-004	4.30800E-002	3.96300E-002	0.00000E+000	7.91118E+001	7.91118E+001	2.51400E-002	0.00000E+000	7.97404E+001
Welders	2.66400E-002	1.14450E-001	1.27650E-001	1.80000E-004	6.87000E-003	6.87000E-003	0.00000E+000	1.33637E+001	1.33637E+001	2.17000E-003	0.00000E+000	1.34180E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	2.94000E-003	6.71700E-002	9.07000E-002	1.50000E-004	7.10000E-004	7.10000E-004	0.00000E+000	1.26386E+001	1.26386E+001	1.03000E-003	0.00000E+000	1.26643E+001
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	6.00000E-005	0.00000E+000	0.00000E+000	0.00000E+000	4.12448E+000	4.12448E+000	4.30000E-004	0.00000E+000	4.13519E+000
Cranes	8.81000E-003	1.70290E-001	1.90840E-001	3.60000E-004	9.70000E-004	9.70000E-004	0.00000E+000	3.20301E+001	3.20301E+001	1.01900E-002	0.00000E+000	3.22847E+001
Excavators	9.50000E-004	1.84300E-002	2.93900E-002	4.00000E-005	1.30000E-004	1.30000E-004	0.00000E+000	3.47764E+000	3.47764E+000	1.10000E-003	0.00000E+000	3.50514E+000
Forklifts	8.02000E-003	1.83220E-001	2.47410E-001	3.30000E-004	1.93000E-003	1.93000E-003	0.00000E+000	2.90919E+001	2.90919E+001	9.25000E-003	0.00000E+000	2.93232E+001
Generator Sets	9.34000E-003	2.13280E-001	2.88000E-001	4.70000E-004	2.24000E-003	2.24000E-003	0.00000E+000	4.01297E+001	4.01297E+001	2.48000E-003	0.00000E+000	4.01916E+001
Graders	1.22000E-003	2.35300E-002	2.63700E-002	5.00000E-005	1.30000E-004	1.30000E-004	0.00000E+000	4.47441E+000	4.47441E+000	1.42000E-003	0.00000E+000	4.50981E+000
Pavers	6.93000E-003	1.34050E-001	2.13780E-001	2.80000E-004	9.70000E-004	9.70000E-004	0.00000E+000	2.51845E+001	2.51845E+001	8.02000E-003	0.00000E+000	2.53849E+001
Paving Equipment	9.05000E-003	1.75000E-001	2.79090E-001	3.70000E-004	1.27000E-003	1.27000E-003	0.00000E+000	3.27322E+001	3.27322E+001	1.04200E-002	0.00000E+000	3.29927E+001
Rollers	5.79000E-003	1.32220E-001	1.78540E-001	2.40000E-004	1.39000E-003	1.39000E-003	0.00000E+000	2.10762E+001	2.10762E+001	6.71000E-003	0.00000E+000	2.12439E+001
Rubber Tired Dozers	4.08000E-003	7.88300E-002	8.83500E-002	1.70000E-004	4.50000E-004	4.50000E-004	0.00000E+000	1.49557E+001	1.49557E+001	4.73000E-003	0.00000E+000	1.50740E+001
Tractors/Loaders/Balckhoes	2.16400E-002	4.94090E-001	6.67200E-001	8.80000E-004	5.19000E-003	5.19000E-003	0.00000E+000	7.91117E+001	7.91117E+001	2.51400E-002	0.00000E+000	7.97404E+001
Welders	7.52000E-003	1.20010E-001	1.06280E-001	1.80000E-004	1.09000E-003	1.09000E-003	0.00000E+000	1.33637E+001	1.33637E+001	2.17000E-003	0.00000E+000	1.34180E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	7.67956E-001	2.33132E-001	2.52942E-003	0.00000E+000	8.81469E-001	8.81469E-001	0.00000E+000	1.58245E-006	1.58245E-006	0.00000E+000	0.00000E+000	1.57924E-006
Cement and Mortar Mixers	1.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	2.42454E-006	2.42454E-006	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	7.11903E-001	5.32556E-001	-3.64215E-001	0.00000E+000	9.36808E-001	9.31303E-001	0.00000E+000	1.24883E-006	1.24883E-006	0.00000E+000	0.00000E+000	1.23898E-006
Excavators	5.15306E-001	8.35405E-002	-2.01063E-001	0.00000E+000	8.65979E-001	8.53933E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.85294E-006
Forklifts	7.59014E-001	3.84672E-001	2.46777E-002	0.00000E+000	9.15647E-001	9.08314E-001	0.00000E+000	1.03121E-006	1.03121E-006	0.00000E+000	0.00000E+000	1.02308E-006
Generator Sets	6.96556E-001	1.89943E-001	-9.07025E-002	0.00000E+000	8.55949E-001	8.55949E-001	0.00000E+000	1.24596E-006	1.24596E-006	0.00000E+000	0.00000E+000	1.24404E-006
Graders	6.65753E-001	5.23202E-001	-9.12255E-001	0.00000E+000	9.17722E-001	9.10959E-001	0.00000E+000	2.23493E-006	2.23493E-006	0.00000E+000	0.00000E+000	0.00000E+000
Pavers	5.88724E-001	2.64633E-001	-2.28338E-001	0.00000E+000	8.91134E-001	8.81707E-001	0.00000E+000	1.19121E-006	1.19121E-006	0.00000E+000	0.00000E+000	1.18180E-006
Paving Equipment	5.24435E-001	1.26049E-001	-2.27417E-001	0.00000E+000	8.72490E-001	8.61354E-001	0.00000E+000	9.16527E-007	9.16527E-007	0.00000E+000	0.00000E+000	9.09291E-007
Rollers	7.09483E-001	3.31310E-001	-4.22042E-002	0.00000E+000	8.92248E-001	8.82799E-001	0.00000E+000	1.42341E-006	1.42341E-006	0.00000E+000	0.00000E+000	1.41217E-006
Rubber Tired Dozers	8.15552E-001	6.65194E-001	-5.75772E-002	0.00000E+000	9.60801E-001	9.57386E-001	0.00000E+000	1.33728E-006	1.33728E-006	0.00000E+000	0.00000E+000	1.32679E-006
Tractors/Loaders/Balckhoes	6.66718E-001	2.42158E-001	-1.92484E-002	0.00000E+000	8.79526E-001	8.69039E-001	0.00000E+000	1.13763E-006	1.13763E-006	0.00000E+000	0.00000E+000	1.12866E-006
Welders	7.17718E-001	-4.85802E-002	1.67411E-001	0.00000E+000	8.41339E-001	8.41339E-001	0.00000E+000	7.48298E-007	7.48298E-007	0.00000E+000	0.00000E+000	1.49053E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00

No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.02	0.01	0.02	0.01	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.19	0.05	0.19	0.05	0.00	0.00
Grading	Fugitive Dust	0.05	0.03	0.02	0.01	0.55	0.55
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.07	0.04	0.03	0.02	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.60	29.60	29.60	29.59	29.60
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.02	0.19		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		



No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

## Redding Rancheria FTT and Casino Project – Alternative F

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## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	5.00	2.00

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tblConstructionPhase	PhaseEndDate	7/5/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	81.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	0.00	66.00
tblVehicleTrips	PB_TP	0.00	34.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98

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tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	0.0182	2.3900e-003	0.0206	9.9700e-003	2.2000e-003	0.0122	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

**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					
2019	4.4200e-003	0.0456	0.0227	4.0000e-005	8.2700e-003	2.3900e-003	0.0107	4.5100e-003	2.2000e-003	6.7100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785
Maximum	4.4200e-003	0.0456	0.0227	4.0000e-005	8.2700e-003	2.3900e-003	0.0107	4.5100e-003	2.2000e-003	6.7100e-003	0.0000	3.5514	3.5514	1.0900e-003	0.0000	3.5785

	ROG	NOx	CO	SO2	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	54.59	0.00	48.25	54.76	0.00	44.86	0.00	0.00	0.00	0.00	0.00	0.00



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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2019	9-30-2019	0.0358	0.0358
		Highest	0.0358	0.0358

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1443	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.6958	0.6958	3.0000e-005	1.0000e-005	0.6986
Mobile	0.3726	3.7386	2.1267	9.2100e-003	0.3173	4.9100e-003	0.3222	0.0853	4.5800e-003	0.0899	0.0000	861.4896	861.4896	0.1125	0.0000	864.3023
Waste						0.0000	0.0000		0.0000	0.0000	11.7735	0.0000	11.7735	0.6958	0.0000	29.1683
Water						0.0000	0.0000		0.0000	0.0000	5.9752	29.6470	35.6222	0.6151	0.0148	55.3993
<b>Total</b>	<b>0.5169</b>	<b>3.7387</b>	<b>2.1425</b>	<b>9.2100e-003</b>	<b>0.3173</b>	<b>4.9700e-003</b>	<b>0.3223</b>	<b>0.0853</b>	<b>4.6400e-003</b>	<b>0.0899</b>	<b>17.7486</b>	<b>891.8633</b>	<b>909.6120</b>	<b>1.4235</b>	<b>0.0148</b>	<b>949.6013</b>

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**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1443	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.6958	0.6958	3.0000e-005	1.0000e-005	0.6986
Mobile	0.3726	3.7386	2.1267	9.2100e-003	0.3173	4.9100e-003	0.3222	0.0853	4.5800e-003	0.0899	0.0000	861.4896	861.4896	0.1125	0.0000	864.3023
Waste						0.0000	0.0000		0.0000	0.0000	11.7735	0.0000	11.7735	0.6958	0.0000	29.1683
Water						0.0000	0.0000		0.0000	0.0000	4.2065	20.8715	25.0780	0.4330	0.0104	39.0011
<b>Total</b>	<b>0.5169</b>	<b>3.7387</b>	<b>2.1425</b>	<b>9.2100e-003</b>	<b>0.3173</b>	<b>4.9700e-003</b>	<b>0.3223</b>	<b>0.0853</b>	<b>4.6400e-003</b>	<b>0.0899</b>	<b>15.9800</b>	<b>883.0878</b>	<b>899.0678</b>	<b>1.2414</b>	<b>0.0104</b>	<b>933.2031</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9.96</b>	<b>0.98</b>	<b>1.16</b>	<b>12.79</b>	<b>29.57</b>	<b>1.73</b>

**3.0 Construction Detail****Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

**Acres of Grading (Site Preparation Phase): 0**

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**Acres of Grading (Grading Phase): 0****Acres of Paving: 4.18****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0181	0.0000	0.0181	9.9300e-003	0.0000	9.9300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>0.0181</b>	<b>2.3900e-003</b>	<b>0.0205</b>	<b>9.9300e-003</b>	<b>2.2000e-003</b>	<b>0.0121</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

**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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**3.2 Site Preparation - 2019****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					8.1300e-003	0.0000	8.1300e-003	4.4700e-003	0.0000	4.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3400e-003	0.0456	0.0221	4.0000e-005		2.3900e-003	2.3900e-003		2.2000e-003	2.2000e-003	0.0000	3.4169	3.4169	1.0800e-003	0.0000	3.4439
<b>Total</b>	<b>4.3400e-003</b>	<b>0.0456</b>	<b>0.0221</b>	<b>4.0000e-005</b>	<b>8.1300e-003</b>	<b>2.3900e-003</b>	<b>0.0105</b>	<b>4.4700e-003</b>	<b>2.2000e-003</b>	<b>6.6700e-003</b>	<b>0.0000</b>	<b>3.4169</b>	<b>3.4169</b>	<b>1.0800e-003</b>	<b>0.0000</b>	<b>3.4439</b>

**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	8.0000e-005	7.0000e-005	6.5000e-004	0.0000	1.4000e-004	0.0000	1.4000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1345	0.1345	1.0000e-005	0.0000	0.1346
<b>Total</b>	<b>8.0000e-005</b>	<b>7.0000e-005</b>	<b>6.5000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>4.0000e-005</b>	<b>0.0000</b>	<b>0.1345</b>	<b>0.1345</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.1346</b>

**4.0 Operational Detail - Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

## 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	0.3726	3.7386	2.1267	9.2100e-003	0.3173	4.9100e-003	0.3222	0.0853	4.5800e-003	0.0899	0.0000	861.4896	861.4896	0.1125	0.0000	864.3023
Unmitigated	0.3726	3.7386	2.1267	9.2100e-003	0.3173	4.9100e-003	0.3222	0.0853	4.5800e-003	0.0899	0.0000	861.4896	861.4896	0.1125	0.0000	864.3023

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	855,191	855,191
Total	1,896.99	1,896.99	1,896.99	855,191	855,191

## 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
Arena	9.50	7.30	7.30	0.00	0.00	0.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	81.00	19.00	0	66	34

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

**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	0.6946	0.6946	3.0000e-005	1.0000e-005	0.6973
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.6946	0.6946	3.0000e-005	1.0000e-005	0.6973
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	22.6981	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2200e-003</b>

**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					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	22.6981	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2100e-003	1.2100e-003	0.0000	0.0000	1.2200e-003
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2100e-003</b>	<b>1.2100e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.2200e-003</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2387.72	0.6946	3.0000e-005	1.0000e-005	0.6973
<b>Total</b>		<b>0.6946</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6973</b>

**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	2387.72	0.6946	3.0000e-005	1.0000e-005	0.6973
<b>Total</b>		<b>0.6946</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.6973</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive 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	0.1443	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
Unmitigated	0.1443	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**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	0.0264					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4500e-003	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
<b>Total</b>	<b>0.1444</b>	<b>1.4000e-004</b>	<b>0.0158</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0309</b>	<b>0.0309</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0329</b>

**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	0.0264					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1165					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4500e-003	1.4000e-004	0.0158	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0309	0.0309	8.0000e-005	0.0000	0.0329
<b>Total</b>	<b>0.1444</b>	<b>1.4000e-004</b>	<b>0.0158</b>	<b>0.0000</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>		<b>6.0000e-005</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>0.0309</b>	<b>0.0309</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>0.0329</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	25.0780	0.4330	0.0104	39.0011
Unmitigated	35.6222	0.6151	0.0148	55.3993

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**7.2 Water by Land Use****Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	18.834 / 0	35.6222	0.6151	0.0148	55.3993
<b>Total</b>		<b>35.6222</b>	<b>0.6151</b>	<b>0.0148</b>	<b>55.3993</b>

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	0 / 0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	13.2591 / 0	25.0780	0.4330	0.0104	39.0011
<b>Total</b>		<b>25.0780</b>	<b>0.4330</b>	<b>0.0104</b>	<b>39.0011</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	11.7735	0.6958	0.0000	29.1683
Unmitigated	11.7735	0.6958	0.0000	29.1683

**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	58	11.7735	0.6958	0.0000	29.1683
<b>Total</b>		<b>11.7735</b>	<b>0.6958</b>	<b>0.0000</b>	<b>29.1683</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

**8.2 Waste by Land Use****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
User Defined Recreational	58	11.7735	0.6958	0.0000	29.1683
<b>Total</b>		<b>11.7735</b>	<b>0.6958</b>	<b>0.0000</b>	<b>29.1683</b>

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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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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Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Annual

## **11.0 Vegetation**

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Summer

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	5.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblConstructionPhase	PhaseEndDate	7/5/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	81.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	0.00	66.00
tblVehicleTrips	PB_TP	0.00	34.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4362	45.6368	22.8384	0.0397	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799
Maximum	4.4362	45.6368	22.8384	0.0397	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,931.9218	3,931.9218	1.1983	0.0000	3,961.8799

	ROG	NOx	CO	SO2	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	54.55	0.00	48.22	54.78	0.00	44.88	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	2.8649	20.6973	11.1104	0.0537	1.8308	0.0266	1.8574	0.4900	0.0249	0.5148		5,532.0646	5,532.0646	0.6447		5,548.1829
<b>Total</b>	<b>3.6639</b>	<b>20.6989</b>	<b>11.2859</b>	<b>0.0537</b>	<b>1.8308</b>	<b>0.0273</b>	<b>1.8580</b>	<b>0.4900</b>	<b>0.0255</b>	<b>0.5154</b>		<b>5,532.4505</b>	<b>5,532.4505</b>	<b>0.6457</b>	<b>0.0000</b>	<b>5,548.5932</b>

**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	lb/day										lb/day					
Area	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	2.8649	20.6973	11.1104	0.0537	1.8308	0.0266	1.8574	0.4900	0.0249	0.5148		5,532.0646	5,532.0646	0.6447		5,548.1829
<b>Total</b>	<b>3.6639</b>	<b>20.6989</b>	<b>11.2859</b>	<b>0.0537</b>	<b>1.8308</b>	<b>0.0273</b>	<b>1.8580</b>	<b>0.4900</b>	<b>0.0255</b>	<b>0.5154</b>		<b>5,532.4505</b>	<b>5,532.4505</b>	<b>0.6457</b>	<b>0.0000</b>	<b>5,548.5932</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.18

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.3904</b>	<b>10.5202</b>	<b>4.4688</b>	<b>2.1991</b>	<b>6.6679</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.1012	0.0641	0.7754	1.6600e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		165.4689	165.4689	6.6600e-003		165.6354
<b>Total</b>	<b>0.1012</b>	<b>0.0641</b>	<b>0.7754</b>	<b>1.6600e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>165.4689</b>	<b>165.4689</b>	<b>6.6600e-003</b>		<b>165.6354</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8649	20.6973	11.1104	0.0537	1.8308	0.0266	1.8574	0.4900	0.0249	0.5148		5,532.0646	5,532.0646	0.6447		5,548.1829
Unmitigated	2.8649	20.6973	11.1104	0.0537	1.8308	0.0266	1.8574	0.4900	0.0249	0.5148		5,532.0646	5,532.0646	0.6447		5,548.1829

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	855,191	855,191
Total	1,896.99	1,896.99	1,896.99	855,191	855,191

## 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
Arena	9.50	7.30	7.30	0.00	0.00	0.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	81.00	19.00	0	66	34

## 4.4 Fleet Mix

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
NaturalGas Unmitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	0.0621865	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	6.21865e-005	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Unmitigated	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0161	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
<b>Total</b>	<b>0.7991</b>	<b>1.5800e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4030</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0161	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
<b>Total</b>	<b>0.7991</b>	<b>1.5800e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4030</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Summer

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**9.0 Operational Offroad**

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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**

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Winter

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	1,710.00	Space	4.18	604,500.00	0
Arena	10.00	1000sqft	0.08	10,000.00	0
User Defined Recreational	9.83	User Defined Unit	0.00	9,826.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	82
Climate Zone	3			Operational Year	2040
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Project Characteristics - Refer to CalEEMod in Appendix Q of the EIS.

Land Use - Refer to CalEEMod Tables in Appendix Q of the EIS.

Construction Phase - Refer to CalEEMod in Appendix Q of the EIS.

Off-road Equipment -

Off-road Equipment -

Architectural Coating - Refer to CalEEMod in Appendix Q of the EIS.

Vehicle Trips - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Coating - Refer to CalEEMod Table in Appendix Q of the EIS.

Energy Use - Refer to CalEEMod Table in Appendix Q of the EIS.

Water And Wastewater - Refer to CalEEMod Table in Appendix Q of the EIS.

Solid Waste - Refer to CalEEMod Table in Appendix Q of the EIS.

Land Use Change -

Construction Off-road Equipment Mitigation - Refer to CalEEMod Table in Appendix Q of the EIS.

Area Mitigation -

Water Mitigation -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Process Boilers -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaCoating	Area_EF_Residential_Exterior	250	150
tblAreaCoating	Area_EF_Residential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15
tblConstructionPhase	NumDays	5.00	2.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblConstructionPhase	PhaseEndDate	7/5/2019	7/2/2019
tblEnergyUse	LightingElect	2.78	0.00
tblEnergyUse	LightingElect	2.63	0.00
tblEnergyUse	NT24E	4.16	0.00
tblEnergyUse	NT24E	0.00	0.24
tblEnergyUse	NT24NG	3.84	0.00
tblEnergyUse	NT24NG	0.00	2.3100e-003
tblEnergyUse	T24E	2.05	0.00
tblEnergyUse	T24E	3.92	0.00
tblEnergyUse	T24NG	17.11	0.00
tblLandUse	BuildingSpaceSquareFeet	684,000.00	604,500.00
tblLandUse	BuildingSpaceSquareFeet	0.00	9,826.00
tblLandUse	LandUseSquareFeet	684,000.00	604,500.00
tblLandUse	LandUseSquareFeet	0.00	9,826.00
tblLandUse	LotAcreage	15.39	4.18
tblLandUse	LotAcreage	3.21	0.08
tblProjectCharacteristics	OperationalYear	2018	2040
tblSolidWaste	SolidWasteGenerationRate	0.28	0.00
tblSolidWaste	SolidWasteGenerationRate	0.00	58.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CC_TTP	0.00	81.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	DV_TP	0.00	66.00
tblVehicleTrips	PB_TP	0.00	34.00
tblVehicleTrips	ST_TR	10.71	0.00
tblVehicleTrips	ST_TR	0.00	192.98

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

tblVehicleTrips	SU_TR	10.71	0.00
tblVehicleTrips	SU_TR	0.00	192.98
tblVehicleTrips	WD_TR	10.71	0.00
tblVehicleTrips	WD_TR	0.00	192.98
tblWater	IndoorWaterUseRate	4,307,701.18	0.00
tblWater	IndoorWaterUseRate	0.00	18,834,000.00
tblWater	OutdoorWaterUseRate	274,959.65	0.00

## 2.0 Emissions Summary

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## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	4.4235	45.6495	22.7205	0.0394	18.2141	2.3915	20.6056	9.9699	2.2001	12.1700	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4235	45.6495	22.7205	0.0394	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4
Maximum	4.4235	45.6495	22.7205	0.0394	8.2777	2.3915	10.6691	4.5080	2.2001	6.7082	0.0000	3,909.951 3	3,909.951 3	1.1975	0.0000	3,939.887 4

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.55	0.00	48.22	54.78	0.00	44.88	0.00	0.00	0.00	0.00	0.00	0.00

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	1.9068	20.3292	13.3525	0.0481	1.8308	0.0275	1.8583	0.4900	0.0257	0.5156		4,956.838 4	4,956.838 4	0.7348		4,975.209 2
<b>Total</b>	<b>2.7058</b>	<b>20.3308</b>	<b>13.5280</b>	<b>0.0481</b>	<b>1.8308</b>	<b>0.0281</b>	<b>1.8589</b>	<b>0.4900</b>	<b>0.0263</b>	<b>0.5162</b>		<b>4,957.224 3</b>	<b>4,957.224 3</b>	<b>0.7358</b>	<b>0.0000</b>	<b>4,975.619 5</b>

**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	lb/day										lb/day					
Area	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Energy	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
Mobile	1.9068	20.3292	13.3525	0.0481	1.8308	0.0275	1.8583	0.4900	0.0257	0.5156		4,956.838 4	4,956.838 4	0.7348		4,975.209 2
<b>Total</b>	<b>2.7058</b>	<b>20.3308</b>	<b>13.5280</b>	<b>0.0481</b>	<b>1.8308</b>	<b>0.0281</b>	<b>1.8589</b>	<b>0.4900</b>	<b>0.0263</b>	<b>0.5162</b>		<b>4,957.224 3</b>	<b>4,957.224 3</b>	<b>0.7358</b>	<b>0.0000</b>	<b>4,975.619 5</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

	ROG	NOx	CO	SO2	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	Site Preparation	Site Preparation	7/1/2019	7/2/2019	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.18

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

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

**3.2 Site Preparation - 2019****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>18.0663</b>	<b>2.3904</b>	<b>20.4566</b>	<b>9.9307</b>	<b>2.1991</b>	<b>12.1298</b>		<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>



## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1298	0.0000	8.1298	4.4688	0.0000	4.4688			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
<b>Total</b>	<b>4.3350</b>	<b>45.5727</b>	<b>22.0630</b>	<b>0.0380</b>	<b>8.1298</b>	<b>2.3904</b>	<b>10.5202</b>	<b>4.4688</b>	<b>2.1991</b>	<b>6.6679</b>	<b>0.0000</b>	<b>3,766.4529</b>	<b>3,766.4529</b>	<b>1.1917</b>		<b>3,796.2445</b>

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**3.2 Site Preparation - 2019****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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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
Worker	0.0885	0.0768	0.6575	1.4400e-003	0.1479	1.0900e-003	0.1490	0.0392	1.0100e-003	0.0402		143.4985	143.4985	5.7800e-003		143.6429
<b>Total</b>	<b>0.0885</b>	<b>0.0768</b>	<b>0.6575</b>	<b>1.4400e-003</b>	<b>0.1479</b>	<b>1.0900e-003</b>	<b>0.1490</b>	<b>0.0392</b>	<b>1.0100e-003</b>	<b>0.0402</b>		<b>143.4985</b>	<b>143.4985</b>	<b>5.7800e-003</b>		<b>143.6429</b>

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9068	20.3292	13.3525	0.0481	1.8308	0.0275	1.8583	0.4900	0.0257	0.5156		4,956.838 4	4,956.838 4	0.7348		4,975.209 2
Unmitigated	1.9068	20.3292	13.3525	0.0481	1.8308	0.0275	1.8583	0.4900	0.0257	0.5156		4,956.838 4	4,956.838 4	0.7348		4,975.209 2

## 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	0.00		
Enclosed Parking Structure	0.00	0.00	0.00		
User Defined Recreational	1,896.99	1,896.99	1,896.99	855,191	855,191
Total	1,896.99	1,896.99	1,896.99	855,191	855,191

## 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
Arena	9.50	7.30	7.30	0.00	0.00	0.00	66	28	6
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Recreational	9.50	7.30	7.30	0.00	81.00	19.00	0	66	34

## 4.4 Fleet Mix

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
Arena	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484
User Defined Recreational	0.570205	0.028297	0.175699	0.082761	0.009256	0.003555	0.013572	0.108841	0.001271	0.000925	0.004036	0.001098	0.000484

## 5.0 Energy Detail

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Historical Energy Use: N

## 5.1 Mitigation Measures Energy

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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	lb/day										lb/day					
NaturalGas Mitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
NaturalGas Unmitigated	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	0.0621865	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**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	lb/day										lb/day					
Arena	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
Enclosed Parking Structure	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
User Defined Recreational	6.21865e-005	0.0000	1.0000e-005	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		7.3200e-003	7.3200e-003	0.0000	0.0000	7.3600e-003
<b>Total</b>		<b>0.0000</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>7.3200e-003</b>	<b>7.3200e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>7.3600e-003</b>

**6.0 Area Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
Unmitigated	0.7991	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0161	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
<b>Total</b>	<b>0.7991</b>	<b>1.5800e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4030</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1446					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.6384					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0161	1.5800e-003	0.1755	1.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004		0.3786	0.3786	9.8000e-004		0.4030
<b>Total</b>	<b>0.7991</b>	<b>1.5800e-003</b>	<b>0.1755</b>	<b>1.0000e-005</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>6.2000e-004</b>	<b>6.2000e-004</b>		<b>0.3786</b>	<b>0.3786</b>	<b>9.8000e-004</b>		<b>0.4030</b>

**7.0 Water Detail**

## Redding Rancheria FTT and Casino Project – Alternative F - Shasta County, Winter

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**7.1 Mitigation Measures Water**

Use Reclaimed Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

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**8.0 Waste Detail****8.1 Mitigation Measures Waste**

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**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

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



## Redding Rancheria FTT and Casino Project – Alternative F

### Shasta County, Mitigation Report

#### Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

#### OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Rubber Tired Dozers	Diesel	No Change	0	3	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	4	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr							Unmitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12482E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Rubber Tired Dozers	3.40000E-003	3.62200E-002	1.28500E-002	3.00000E-005	1.77000E-003	1.62000E-003	0.00000E+000	2.30088E+000	2.30088E+000	7.30000E-004	0.00000E+000	2.31908E+000
Tractors/Loaders/Backhoes	9.30000E-004	9.35000E-003	9.21000E-003	1.00000E-005	6.20000E-004	5.70000E-004	0.00000E+000	1.11599E+000	1.11599E+000	3.50000E-004	0.00000E+000	1.12481E+000

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	8.89031E-006

### Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input			
Yes	Soil Stabilizer for unpaved Roads	PM10 Reduction	10.00	PM2.5 Reduction	10.00		
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	0.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Site Preparation	Fugitive Dust	0.02	0.01	0.01	0.00	0.55	0.55
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

### Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	29.60	29.60	29.60	29.60	29.59	29.60
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.02	0.19		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

**Area Mitigation**

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	150.00
Yes	Use Low VOC Paint (Residential Exterior)	150.00
Yes	Use Low VOC Paint (Non-residential Interior)	150.00
Yes	Use Low VOC Paint (Non-residential Exterior)	150.00
Yes	Use Low VOC Paint (Parking)	150.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

**Energy Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

**Water Mitigation Measures**

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
Yes	Use Reclaimed Water	30.00	30.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

**Solid Waste Mitigation**

Mitigation Measures	Input Value
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Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
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## *CO HOT SPOTS ANALYSIS CALCULATION TABLES*

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## Simplified Caline4 Carbon Monoxide Analysis

### Project Title

Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO:	984 East Ave, Ste 4, Chico, CA 95926*
Background 1-hour CO Concentration (ppm):	2.4
Background 8-hour CO Concentration (ppm):	1.45
Persistence Factor:	0.7
Analysis Year:	2020/2035

*\*This is the closest air monitoring site for CO to the proposed project site. Background 1-hour CO Concentrations were determined from Sacramento Valley Air Basin yearly maximum values as this data cannot be acquired from the Chico Air Monitoring Site*

**Project Title:** Redding Rancheria

#### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2020

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

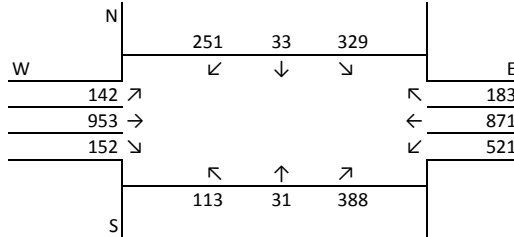
0.7 Urban Locations

#### Roadway Data

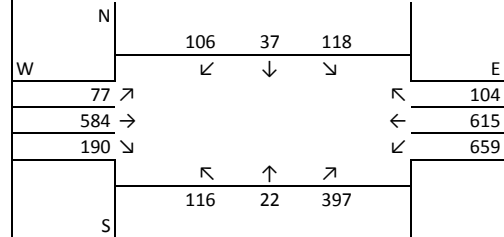
Intersection: S Bonnyview Rd @ Bechelli Ln  
 Analysis Condition: Proposed Project (Alt. A) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	Bechelli Ln	At Grade	2	30
East-West Roadway:	S Bonnyview Rd	At Grade	4	50

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 1145  
 E-W Road: 2822

N-S Road: 796  
 E-W Road: 2229

#### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

	A1	A2	A3	A4	B	C				
	Reference CO Concentrations (ppm)				Traffic	Emission	Estimated CO Concentrations (ppm)			
Roadway	E.O.R.	25 Feet	50 Feet	100 Feet	Volume	Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1145	2.75	0.12	0.09	0.07	0.05
East-West Road	11.9	7.0	5.4	3.8	2822	2.76	0.93	0.55	0.42	0.30
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	796	2.75	0.08	0.06	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	2229	2.76	0.73	0.43	0.33	0.23

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

#### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.44	3.21	2.18
25 Feet	3.03	2.89	1.89
50 Feet	2.89	2.78	1.79
100 Feet	2.75	2.67	1.69

Project Title: Redding Rancheria

#### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2020

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

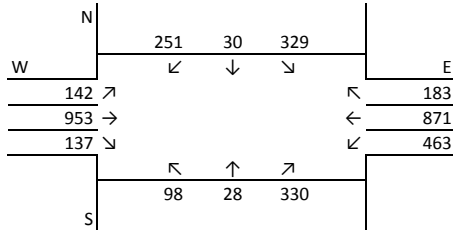
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

#### Roadway Data

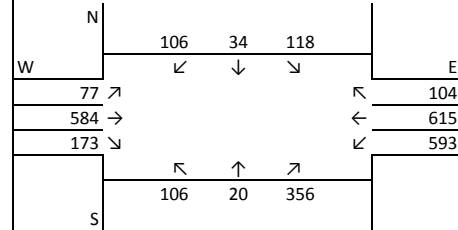
Intersection: S Bonnyview Rd @ Bechelli Ln  
 Analysis Condition: Proposed Project (Alt. C) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	Bechelli Ln	At Grade	2	30
East-West Roadway:	S Bonnyview Rd	At Grade	4	50

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 1066  
 E-W Road: 2749

N-S Road: 740  
 E-W Road: 2146

#### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	25 Feet	50 Feet	100 Feet	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1066	2.75	0.11	0.08	0.06	0.05
East-West Road	11.9	7.0	5.4	3.8	2749	2.76	0.90	0.53	0.41	0.29
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	740	2.75	0.08	0.05	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	2146	2.76	0.70	0.41	0.32	0.23

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

#### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.41	3.18	2.16
25 Feet	3.01	2.87	1.88
50 Feet	2.87	2.76	1.78
100 Feet	2.74	2.66	1.69

Project Title: Redding Rancheria

#### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926

Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40

Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45

Persistence Factor:<sup>3</sup> 0.7

Analysis Year: 2020

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

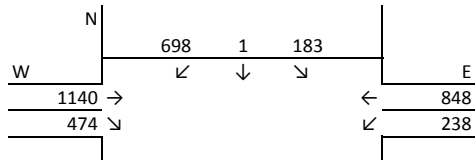
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

#### Roadway Data

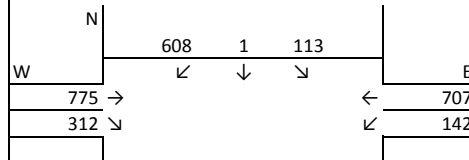
Intersection: S Bonnyview Rd @ I-5 SB Ramps  
Analysis Condition: Proposed Project (Alt. C) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 SB Ramps	2	15	15
East-West Roadway:	S Bonnyview Rd	4	45	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volume



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 882  
E-W Road: 2700

N-S Road: 722  
E-W Road: 1936

#### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	882	2.72	0.09	0.06	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	2700	2.76	0.89	0.52	0.40	0.28
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	722	2.72	0.07	0.05	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	1936	2.76	0.64	0.37	0.29	0.20

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

#### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.37	3.11	2.13
25 Feet	2.99	2.83	1.86
50 Feet	2.85	2.73	1.77
100 Feet	2.72	2.64	1.68

Project Title: Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2020

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

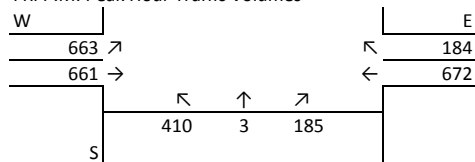
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

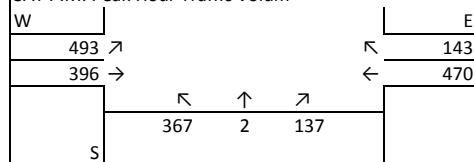
Intersection: S Bonnyview Rd @ I-5 NB Ramps  
 Analysis Condition: Proposed Project (Alt. C) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 NB Ramps	At Grade	2	15
East-West Roadway:	S Bonnyview Rd	At Grade	4	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 598  
 E-W Road: 2180

N-S Road: 506  
 E-W Road: 1502

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	598	2.72	0.06	0.04	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	2180	2.76	0.72	0.42	0.32	0.23
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	506	2.72	0.05	0.04	0.03	0.02
East-West Road	11.9	7.0	5.4	3.8	1502	2.76	0.49	0.29	0.22	0.16

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

E.O.R.	FRI P.M.	SAT P.M.	
	Peak Hour	Peak Hour	8-Hour
E.O.R.	3.18	2.94	1.99
25 Feet	2.86	2.73	1.78
50 Feet	2.76	2.65	1.70
100 Feet	2.66	2.58	1.63

**Project Title:** Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2035

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

Intersection: S Bonnyview Rd @ I-5 SB Ramps  
 Analysis Condition: Proposed Project (Alt. D) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 SB Ramps	At Grade	2	15
East-West Roadway:	S Bonnyview Rd	At Grade	4	45

FRI P.M. Peak Hour Traffic Volumes

N	823	300	E
W	1499 →	← 1139	
	705 ↘	↙ 330	

SAT P.M. Peak Hour Traffic Volumes

N	710	186	E
W	996 →	← 925	
	434 ↘	↙ 196	

Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 1123  
 E-W Road: 3673

N-S Road: 896  
 E-W Road: 2551

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)				Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	1123	2.75	0.11	0.08	0.07	0.05
East-West Road	11.9	7.0	5.4	3.8	3673	2.76	1.21	0.71	0.55	0.39
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	896	2.75	0.09	0.07	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	2551	2.76	0.84	0.49	0.38	0.27

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.72	3.33	2.37
25 Feet	3.19	2.96	2.01
50 Feet	3.01	2.83	1.88
100 Feet	2.84	2.71	1.76

**Project Title:** Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2035

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

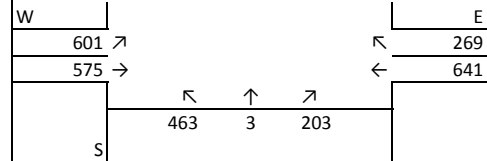
Intersection: S Bonnyview Rd @ I-5 NB Ramps  
 Analysis Condition: Proposed Project (Alt. A) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 NB Ramps	At Grade	2	15
East-West Roadway:	S Bonnyview Rd	At Grade	4	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volume



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 821  
 E-W Road: 3062

N-S Road: 669  
 E-W Road: 2086

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)				Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	821	2.72	0.08	0.06	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	3062	2.76	1.01	0.59	0.46	0.32
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	669	2.72	0.07	0.05	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	2086	2.76	0.69	0.40	0.31	0.22

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.49	3.15	2.21
25 Feet	3.05	2.85	1.91
50 Feet	2.90	2.75	1.80
100 Feet	2.76	2.65	1.70

**Project Title:** Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2035

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

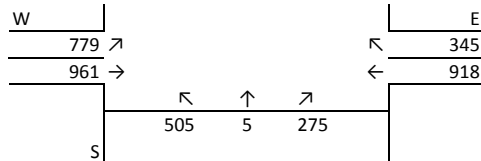
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

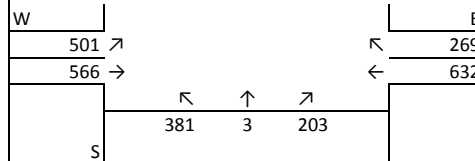
Intersection: S Bonnyview Rd @ I-5 NB Ramps  
 Analysis Condition: Proposed Project (Alt. B) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 NB Ramps	At Grade	15	15
East-West Roadway:	S Bonnyview Rd	At Grade	45	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volume



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 785  
 E-W Road: 3003

N-S Road: 587  
 E-W Road: 1968

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	785	2.72	0.08	0.06	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	3003	2.76	0.99	0.58	0.45	0.31
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	587	2.72	0.06	0.04	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	1968	2.76	0.65	0.38	0.29	0.21

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

	FRI P.M. Peak Hour	SAT P.M. Peak Hour	8-Hour
E.O.R.	3.46	3.10	2.20
25 Feet	3.04	2.82	1.90
50 Feet	2.89	2.73	1.80
100 Feet	2.75	2.63	1.70



**Project Title:** Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2035

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

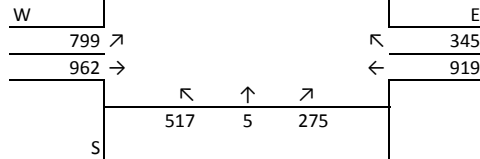
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

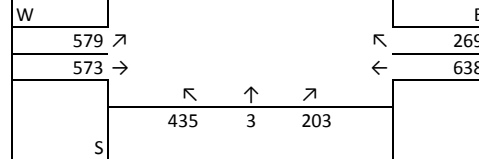
Intersection: S Bonnyview Rd @ I-5 NB Ramps  
 Analysis Condition: Proposed Project (Alt. C) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	I-5 NB Ramps	At Grade	2	15
East-West Roadway:	S Bonnyview Rd	At Grade	4	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volume



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 797  
 E-W Road: 3025

N-S Road: 641  
 E-W Road: 2059

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	797	2.72	0.08	0.06	0.05	0.04
East-West Road	11.9	7.0	5.4	3.8	3025	2.76	0.99	0.58	0.45	0.32
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	641	2.72	0.06	0.05	0.04	0.03
East-West Road	11.9	7.0	5.4	3.8	2059	2.76	0.68	0.40	0.31	0.22

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

E.O.R.	FRI P.M.	SAT P.M.	8-Hour
	Peak Hour	Peak Hour	8-Hour
E.O.R.	3.47	3.14	2.20
25 Feet	3.04	2.84	1.90
50 Feet	2.90	2.74	1.80
100 Feet	2.75	2.64	1.70

**Project Title:** Redding Rancheria

### Background Information

Nearest Air Monitoring Station measuring CO: 984 East Ave, Ste 4, Chico, CA 95926  
 Background 1-hour CO Concentration (ppm):<sup>1</sup> 2.40  
 Background 8-hour CO Concentration (ppm):<sup>2</sup> 1.45  
 Persistence Factor:<sup>3</sup> 0.7  
 Analysis Year: 2035

<sup>1</sup> Second highest concentration recorded during the last two years per CO Protocol (for Sacramento Valley Basin)

<sup>2</sup> Ambient average 8-hour CO concentration in the U.S. in 2013; EPA's ROE, 2013

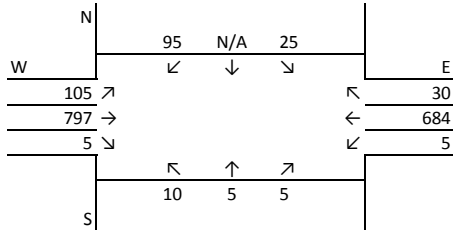
<sup>3</sup> 0.6 Rural or Suburban; 0.7 Urban Locations; 0.8 Urban Sites with a recognized tendency for persistent stagnant meteorological condition and/or persistent traffic

### Roadway Data

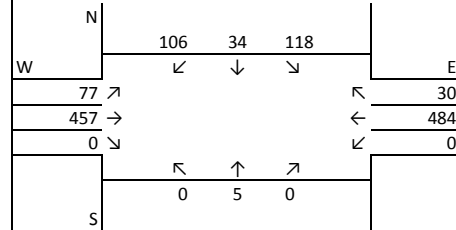
Intersection: Churn Creek Rd @ Alrose Ln  
 Analysis Condition: Proposed Project (Alt. B) with North Access Alternative (Option 1)

	Roadway Type	No. of Lanes	Average Speed	
			Fri P.M.	Sat P.M.
North-South Roadway:	Alrose Ln	At Grade	2	25
East-West Roadway:	Churn Creek Rd	At Grade	2	45

FRI P.M. Peak Hour Traffic Volumes



SAT P.M. Peak Hour Traffic Volumes



Highest Traffic Volumes (Vehicles per Hour)

N-S Road: 140  
 E-W Road: 1626

N-S Road: 263  
 E-W Road: 1048

### Roadway CO Contributions and Concentrations

Emissions = (A x B x C) / 100,000<sup>4</sup>

Roadway	A1	A2	A3	A4	B	C	Estimated CO Concentrations			
	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Reference CO Concentrations (ppm)	Traffic Volume	Emission Factors <sup>5</sup>	E.O.R.	25 Feet	50 Feet	100 Feet
FRI P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	140	2.74	0.01	0.01	0.01	0.01
East-West Road	14.0	7.6	5.7	4.0	1626	2.76	0.63	0.34	0.26	0.18
SAT P.M. Peak Traffic Hour										
North-South Road	3.7	2.7	2.2	1.7	263	2.75	0.03	0.02	0.02	0.01
East-West Road	14.0	7.6	5.7	4.0	1048	2.76	0.40	0.22	0.16	0.12

<sup>4</sup> Methodology from Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines (2011)

<sup>5</sup> Emission factors from EMFAC2014 (2017)

### Total Roadway CO Concentration

Peak Hour Emissions = North-South Concentration + East-West Concentration + Background 1-hour Concentration<sup>4</sup>

8-Hour Emissions = ((Highest Peak Hour Concentration - Background 1-Hour Concentration) x Persistence Factor) + Background 8-Hour Concentration<sup>4</sup>

E.O.R.	FRI P.M.	SAT P.M.	8-Hour
	Peak Hour	Peak Hour	Peak Hour
25 Feet	3.04	2.83	1.90
50 Feet	2.75	2.64	1.70
100 Feet	2.66	2.58	1.63
	2.59	2.53	1.58

*OFF-SITE ACCESS IMPROVEMENT  
CONSTRUCTION EMISSIONS*

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Off-Site Access Improvement Construction Emissions																
Pieces of Equipment	Construction Equipment <sup>1</sup>	Horsepower <sup>2</sup>	Load Factor <sup>2</sup>	Hours in Use <sup>2</sup> (hours/day)	Emission Factors (g/bhp/hr) <sup>5</sup>						Emission (tons/year)					
					CO	ROG	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	ROG	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Preparation and Grading <sup>6</sup>																
1	Excavator	501	0.38	8	0.15	0.17	1.80	0.01	0.06	0.06	0.009	0.010	0.106	0.000	0.004	0.003
1	Grader	427	0.41	8	1.56	0.32	3.34	0.01	0.43	0.12	0.085	0.018	0.181	0.000	0.023	0.006
2	Tractors/Loaders/Backhoes	148	0.37	8	3.14	0.30	3.17	0.01	0.16	0.15	0.106	0.010	0.107	0.000	0.005	0.005
Employee Trips (miles) <sup>3</sup>			3,052		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.060	0.002	0.004	0.000	0.000	0.000
Fugitive Dust (Acres)			4.30												0.002	0.001
2019 Site Preparation and Grading Emissions											0.259	0.040	0.397	0.001	0.032	0.015
Construction																
1	Rough Terrain Forklift	94	0.475	8	7.76	1.98	8.56	0.95	1.39	1.35	0.11	0.03	0.12	0.01	0.02	0.02
1	Tractors/Loader/Backhoe	148	0.42	8	3.14	0.30	3.17	0.01	0.16	0.15	0.06	0.01	0.06	0.00	0.00	0.00
1	Generator Set	148	0.74	8	2.93	0.32	2.989	0.006	0.133	0.133	0.10	0.01	0.10	0.00	0.00	0.00
Paving																
1	Paver	132	0.59	8	8.5	1.0	5.8	0.17	0.16	0.15	0.20	0.02	0.14	0.00	0.00	0.00
1	Paving Equipment	111	0.53	8	8.5	1.0	5.8	0.14	0.16	0.15	0.15	0.02	0.11	0.00	0.00	0.00
1	Rollers	114	0.43	8	8.5	1.0	5.8	0.14	0.16	0.15	0.13	0.02	0.09	0.00	0.00	0.00
Architectural Coating																
1	Air Compressor	148	0.48	8	3.205	0.435	3.228	0.006	0.17	0.17	0.07	0.01	0.07	0.00	0.00	0.00
Fugitive VOC from Coatings <sup>6</sup>			7,825			0.0115						0.04				
Employee Trips (miles) <sup>4</sup>			6,104		17.946	0.735	1.156	0.0078	0.0371	0.0215	0.12	0.00	0.01	0.00	0.00	0.00
2020 Construction Emissions											0.94	0.16	0.69	0.02	0.04	0.04
Total Construction Emissions											1.20	0.20	1.09	0.02	0.07	0.05

<sup>1</sup> Construction equipment list from USEPA approved EmFac 2014 air model.

<sup>2</sup> Default load factors and hours per normal work day from OffRoad 2011.

<sup>3</sup> Based on 10.9 mile trip length, 8 trips per day, and EMFAC, 2014 emission factors (grams/mile).

<sup>4</sup> Based on 10.9 mile trip length, 16 trips per day, and EMFAC, 2014 emission factors (grams/mile).

<sup>5</sup> Emission factors provided by EPA approved OFFROAD 2011, based on equipment age distribution in the U.S. in g/bhp/hr = grams per brake horsepower per hour

<sup>6</sup> based on 3000 sqft and 0.0115 pounds per sqft (CalEEMod, 2016).

Source: EmFac, 2014