

Air Quality and Greenhouse Gas Analysis

Northwest Rocklin Area General Development Plan Project

Prepared for:

THE CITY OF ROCKLIN

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Introduction

This Air Quality and Greenhouse Gas Analysis identifies and analyzes the potential environmental impacts from the Northwest Rocklin Area General Development Plan Project (proposed project) related to air quality and greenhouse gas (GHG) emissions. The information and analysis in this document is organized in accordance with the checklist in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. If the analysis provided in this document identifies potentially significant environmental effects of the project, mitigation measures that should be applied to the project are prescribed. All modeling results are included as an attachment to this document.

Project Summary

The proposed project area, also known as the Highway 65 Corridor Planning Area consists of development areas 104-116 of the Northwest Rocklin General Development Plan area, in the City of Rocklin, California. The project area is bound by State Route 65 on the west, Wildcat Boulevard to the east, the Rocklin City Limits to the North and Sunset Boulevard to the South.

In 2002 the City of Rocklin, granted a maximum daily trip cap of 77,043 trips for the Northwest Rocklin area (NWRA), which was the level of traffic expected to maintain acceptable operations of the City's roadway system. The City of Rocklin now recognizes the marketing and economic disadvantages of limiting the development potential of NWRA properties and has initiated the process of redesignating land uses to reduce the amount of land designated for industrial uses and increase the amount of land designated for retail and residential use.

Fehr and Peers has conducted a Transportation Impact Analysis for the proposed land use changes using the updated City-wide traffic model. The Transportation Impact Analysis proposed a new trip cap of 98,010 trips, which represents an increase of 20,967 trips from the original cap. Fehr and Peers also provided an estimate of the vehicle miles travelled that would result from the estimated increase in daily trips.

Because the number of vehicle trips and related vehicle miles travelled would increase as a result of the proposed project, and vehicle emissions are a large source of air pollutants and greenhouse gas emissions, the proposed increase in allowable trips is herein analyzed for potential impacts related to Air Quality and Greenhouse Gas emissions.

Sources

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III. AIR QUALITY. <i>Would the project:</i>		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less- Than- Significant Impact	No Impact
a.	Conflict with or obstruct implementation of the applicable air quality plan?	☐	✗	☐	☐
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	✗	☐	☐
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	✗	☐	☐
d.	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	✗	☐
e.	Create objectionable odors affecting a substantial number of people?	☐	☐	✗	☐

Discussion

- a-c. The proposed project area is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the Placer County Air Pollution Control District (PCAPCD). The SVAB is designated nonattainment for the federal particulate matter 2.5 microns in diameter (PM_{2.5}) and the State particulate matter 10 microns in diameter (PM₁₀) standards, as well as for both the federal and State ozone standards. The federal Clean Air Act requires areas designated as federal nonattainment to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the national ambient air quality standards (NAAQS). The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them. In compliance with regulations, the PCAPCD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the NAAQS, including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies.

The current applicable air quality plan for the proposed project area is the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan), adopted September 26, 2013. The U.S. Environmental Protection Agency (USEPA) determined the Plan to be adequate and made such findings effective August 25, 2014. On January 9, 2015, the USEPA approved the 2013 Ozone Attainment Plan.

The 2013 Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the CAA requirements, including the NAAQS. It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the

secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area with an attainment deadline of 2027. On October 26, 2015 the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). With the publication of the new NAAQS ozone rules, areas in nonattainment must update their ozone attainment plans and submit new plans by 2020/2021.

General conformity requirements of the regional air quality plan include whether a project would cause or contribute to new violations of any NAAQS, increase the frequency or severity of an existing violation of any NAAQS, or delay timely attainment of any NAAQS. In order to evaluate ozone and other criteria air pollutant emissions and support attainment goals for those pollutants that the area is designated nonattainment, the PCAPCD has recently proposed updates to the District's recommended significance thresholds for emissions of PM₁₀, and ozone precursors – reactive organic gases (ROG) and oxides of nitrogen (NO_x).

The significance thresholds, expressed in pounds per day (lbs/day), listed in Table 1 are the PCAPCD's updated recommended thresholds of significance for use in the evaluation of air quality impacts associated with proposed development projects. The City of Rocklin, as lead agency, utilizes the PCAPCD's recommended thresholds of significance for CEQA evaluation purposes. Thus, if a project's emissions exceed the pollutant thresholds presented in Table 1, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 1		
PCAPCD Thresholds of Significance		
Pollutant	Operational Threshold (lbs/day)	Cumulative Operational Threshold (lbs/day)
ROG	55	55
NO _x	55	55
PM ₁₀	82	82
Source: Placer County Air Pollution Control District. CEQA Thresholds. Accessible at http://www.placer.ca.gov/departments/air/landuseceqa/ceqathresholds . Accessed September 2016.		

Through the combustion of fossil fuels, motor vehicle use produces significant amounts of pollution. In fact, the PCAPCD cites motor vehicles as a primary source of pollution for residential, commercial, and industrial development.¹ Because motor vehicles emit air quality pollutants during their operations, changing the amount of motor vehicle operations in an area would change the amount of air pollutants being emitted in that area.

Implementation of the proposed project would involve changes to the allowable amount of vehicle trips to and from the project area. Originally, the Northwest Rocklin General

¹ Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. October 11, 2012.

Development Plan included a maximum daily trip cap of 77,043 trips; the *Transportation Impact Analysis*, prepared by Fehr and Peers for the proposed project, determined that land use changes would result in a daily trip increase of 20,967 for a total of 98,010 daily trips.² Because mobile source pollutant emissions are directly proportional to vehicle usage, the proposed project would increase the amount of mobile source air pollution generated in the project area, as compared to what was originally anticipated for the Northwest Rocklin Area.

Mobile Emissions Estimation

In order to determine the change in air pollutant emissions that would result from approval of the proposed project, mobile emissions were estimated using the California Emissions Estimator Model (CalEEMod) – a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions. PCAPCD recommends using the most up-to-date version of CalEEMod and as such version 2016.3.1 of the software was used.³ The model applies inherent default values for various land uses, including vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model (e.g., information from the *Transportation Impact Analysis* conducted by Fehr and Peers). Two distinct scenarios were modelled for emissions analysis (see the Appendix for the CalEEMod outputs for both scenarios).

Baseline Modeling Scenario

The first scenario represented operation of the project area under baseline build-out assumptions for the current area daily trip cap. In addition to the application of Fehr and Peers provided average daily trip rates, the baseline build-out modeling scenario assumed build-out of the project area would result in the construction of:

- 1,373,000 square feet (sf) of General Office buildings;
- 1,038,000 sf of Retail buildings;
- 810,000 sf of General Light Industrial buildings; and
- Capacity for 1,200 University students.

Because the baseline scenario represents build-out of the area under currently approved land use designations, the baseline scenario represents a reference point for mobile emission generation in the area. Once established, baseline emissions related to the currently approved daily trip cap may subsequently be compared to estimated emissions that would result due to proposed changes to the daily trip cap. Therefore, a second scenario was modelled using the proposed changes to the daily trip cap.

² Fehr and Peer. *Final Transportation Impact Analysis for the Northwest Rocklin Area General Development Plan*. May 05, 2016.

³ Placer County Air Pollution Control District. *CEQA Air Quality Handbook [pg. 4-2]*. October 11, 2012.

Proposed Project Modeling Scenario

The proposed project scenario assumed that build-out of the project area could result in the construction of:

- 1,390,000 sf of General Office buildings;
- 1,482,000 sf Retail buildings;
- 91,000 sf of General Light Industrial buildings;
- 370 Single Family dwelling units;
- 417 Multi-Family dwelling units; and
- Capacity for 3,300 University students.

In addition to the above land use changes, information from the *Transportation Impact Analysis* was also included in the proposed project modeling scenario. Such information included the estimated daily trip rates used for each type of land use, as well as the increase in the daily trip cap of 20,967 daily trips per day throughout the project area. Fehr and Peers also provided an estimated average trip length for trips within the City of six miles per trip. Therefore, an increase of 20,967 daily trips, where each trip would have an average distance of six-miles, would result in an estimated increase of 125,802 vehicle miles travelled (VMT) per day (i.e. 20,967 daily trips x six miles per trip).⁴ Estimated VMT is important for air quality analysis because the increase in VMT represents the actual increase in the amount of distance travelled in motor vehicles and thus the amount of additional air pollutants emitted. As such, trip lengths in CalEEMod were adjusted to achieve a VMT comparable to the VMT estimated by Fehr and Peers.

By modeling future emissions based on the currently approved daily trip cap for the area as well as modeling potential emissions that would result from the increase in VMT due to the proposed project, the estimated increase in emissions associated with the proposed project can be determined and compared to PCAPCD's operational and cumulative operational emissions thresholds presented in Table 1 above.

Mobile Emissions Comparisons

The estimated operational emissions from mobile sources for the baseline and proposed project scenarios are presented and compared below in Table 2.

Table 2				
UnMitigated Operational Mobile Emissions (lbs/day)				
	Baseline Emissions	Proposed Project Emissions	Difference	Threshold
ROG	163.52	211.07	+47.55	55
NOx	265.73	342.33	+76.6	55
PM₁₀	311.23	396.04	+84.81	82
<i>Source: CalEEMod, October 2016 (See Appendix)</i>				

⁴ Fehr and Peers. *Technical Memorandum: Estimation of VMT for Northwest Rocklin GDP Land Use Changes*. October 12, 2016.

As shown in Table 2, the proposed project would result in an increase in mobile source emissions as compared to the baseline scenario. As discussed earlier, the increase in mobile source emissions would be due to the proposed increase in allowable daily trips in the area. To determine the significance of the estimated increase in mobile source emissions, the difference between baseline emissions and estimated emissions from the proposed project can be compared to PCAPCD's recently proposed thresholds of significance. Emissions of ROG would be anticipated to increase by 47.55 lbs/day with approval of the proposed project. However, such an increase would be below the 55 lbs/day threshold for ROG, and thus emissions of ROG from the proposed project would not substantially contribute to the PCAPCD's nonattainment status for ozone on an operational level.

However, the proposed project would result in an increase of NO_x and PM₁₀ emissions from baseline conditions in excess of PCAPCD's recently proposed thresholds. Therefore, the proposed project could result in a substantial contribution to the PCAPCD's nonattainment status for ozone and PM₁₀ on an operational level.

Cumulative Air Quality

Due to the dispersive nature and regional sourcing of air pollutants, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants, including ozone and PM, is a result of past and present development, and, thus, cumulative impacts related to these pollutants could be considered cumulatively significant.

The project is part of a pattern of urbanization occurring in the greater Sacramento ozone nonattainment area. The growth and combined vehicle usage, and business activity within the nonattainment area from the project, in combination with other past, present, and reasonably foreseeable projects within Rocklin and surrounding areas, could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants.

The PCAPCD recommends using the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a cumulative impact. As discussed above, the PCAPCD's recommended thresholds of significance for ozone precursors and PM₁₀ are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM₁₀ emissions would be greater than the PCAPCD's cumulative-level thresholds, the project could be expected to conflict with relevant attainment plans, and could result in a cumulatively considerable contribution to a significant cumulative impact.

As shown in Table 2 above, the proposed project would result in an increase of ROG emissions that would be below the applicable cumulative-level threshold. However, the proposed project would result in increases of NO_x and PM₁₀ emissions that would exceed the applicable cumulative-level threshold.

Conclusion

While emissions or ROG would not be considered to contribute to the region's nonattainment status for ozone on an operational or cumulative level, the proposed project could contribute emissions of NO_x and PM₁₀ in excess of PCAPCD's operational and cumulative-level thresholds. Thus the proposed project would result in a **potentially significant** impact related to the emission of criteria pollutants for which PCAPCD is in non-attainment

Mitigation Measure(s)

The following mitigation measure would reduce emissions of NO_x and PM₁₀ below the applicable PCAPCD thresholds, and would also contribute to the reduction of Greenhouse Gas emissions, which are discussed further in the Greenhouse Gas section of this report. Consequently, the proposed project would result in a *less-than-significant* impact related to Air Quality.

- III-1. In conjunction with submittal of a development application for any projects within the Northwest Rocklin Area that exceed the 2002 trip cap (as calculated using the trip generation rates provided in the May 2016 Final Transportation Impact Analysis for the Northwest Rocklin Area General Development Plan⁵), the applicant shall prepare and submit an Air Quality Emissions Estimate identifying the project's increase in estimated NO_x and PM₁₀ emissions from mobile sources as compared to those allowed under the 2002 trip cap. The estimated increase in mobile source emissions shall remain at or below 20.7 percent for NO_x and 17.7 percent for PM₁₀. If the emissions estimate identifies an increase beyond those identified above, the applicant shall submit an Air Quality Reduction Plan sufficient to reduce NO_x and/or PM₁₀ emissions to within the allowable emissions increases. The measures included in the Air Quality Reduction Plan would be anticipated to focus on the reduction of mobile source emissions by including project elements that encourage alternative modes of transportation, promote non-motorized transportation and result in the reduction of number of vehicle trips as well as vehicle trip lengths. The Air Quality Reduction Plan may also include payment of mitigation fees into the PCAPCD's Off-site Air Quality Mitigation Fund as a method of reducing NO_x emissions. PCAPCD's Off-site Air Quality Mitigation Fund supports fleet modernizations, repowers, retrofits, and fleet expansions of heavy duty on- and off-road mobile vehicles/equipment; alternative fuels infrastructure or low emission fuel purchases; new or expanded alternative transit service programs; light-duty low emissions vehicle programs; public education; repower of agricultural pump engines; and other beneficial air quality projects, which would help to reduce regional NO_x emissions.*
- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants.

⁵ Fehr and Peer. *Final Transportation Impact Analysis for the Northwest Rocklin Area General Development Plan*. May 05, 2016.

Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project involves a change to the allowable daily trip cap for the Northwest Rocklin Area, but does not involve direct development or siting of new sensitive receptors. Nevertheless, major pollutant concentrations of concern, CO emissions and toxic air contaminant (TAC) emissions, are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. The proposed project involves changes to the maximum daily trip cap for the project area. The City of Rocklin *General Plan Circulation Element* concluded that under currently approved land use designations and trip caps for the Northwest Rocklin Area, the project area's roadway system would operate above the General Plan required Level of Service (LOS) of C.⁶ Subsequent analysis conducted by Fehr and Peers and included in the *Transportation Impact Analysis* determined that the circulation system in the Northwest Rocklin Area included excess capacity that would not be used under the original daily traffic cap. Furthermore, the *Transportation Impact Analysis* concluded that the circulation system of the area would maintain acceptable LOS at all intersections with the addition of 20,967 daily trips to the project area.⁷

In accordance with the State CO Protocol, the PCAPCD recommends further analysis for localized CO concentrations if the project would cause a signalized intersection to be degraded from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F), or substantially worsen an already existing unacceptable peak-hour LOS at an intersection, as determined by a traffic study. As discussed, the project area's circulation system currently has sufficient capacity to accommodate the proposed increase in the daily traffic cap for the area.⁸ Therefore, the proposed project would not result in the degradation of LOS at any intersections from acceptable to unacceptable levels, and the proposed project would not result in the emission of substantial localized CO concentrations.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and

⁶ City of Rocklin. *City of Rocklin General Plan* Adopted October 2012.

⁷ Fehr and Peer. *Final Transportation Impact Analysis for the Northwest Rocklin Area General Development Plan*. May 05, 2016.

⁸ *Ibid.*

constant diesel vehicle traffic are identified as having the highest associated health risks from DPM.

In recognition of potential health effects that TAC emissions could have on future sensitive receptors in the project area, the City of Rocklin *General Plan Air Quality Element* includes Policy OCR-58 and OCR-59, which require development projects to incorporate stationary and mobile source control measures during construction and operation as well as requiring consultation with the PCAPCD to develop stationary and mobile source control measures.⁹ The City of Rocklin *General Plan EIR* concluded that the aforementioned General Plan policies would reduce the exposure of sensitive receptors to substantial TAC concentrations. Additionally, the *General Plan EIR* included Mitigation Measure 4.2.1, which would reduce the exposure of sensitive receptors to potential health risks from TACs by maintaining adequate distance between existing and potential sources of TACS and existing or proposed sensitive receptors.

The proposed project involves the increase of the daily traffic cap for the Northwest Rocklin Area. As such, the proposed project would not directly involve development activities that could expose sensitive receptors to TACs. Additionally, development of the project area would be subject to the aforementioned City of Rocklin *General Plan Policies* and *General Plan EIR* mitigation measures.

Because the proposed project does not directly involve the siting of new sensitive receptors, nor the development of new stationary sources of TACs, the proposed project would not expose sensitive receptors to substantial concentrations of pollutants. Moreover, development of the region would be subject to all relevant *General Plan* policies and *General Plan EIR* mitigation measures. Therefore, impacts related to the exposure of sensitive receptors to substantial pollutant concentrations would be ***less than significant***.

- e. Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Certain land uses such as wastewater treatment facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. Specific development projects are not included in the proposed project; rather, the proposed project involves increases in the daily traffic cap for the proposed project area.

Because the proposed project does not involve direct development activity, the proposed project would not result in the creation of odors from land development. Although less common, emissions of DPM from heavy-duty diesel truck traffic could result in objectionable odors. However, such odors would be created under currently approved build-out conditions. While the proposed project would increase the total amount of vehicle trips, the increase in area vehicle activity would not necessarily create an increase in heavy-duty diesel truck traffic, because much of the traffic increase would be a result of increased

⁹ City of Rocklin. *City of Rocklin General Plan*. Adopted October 2012.

residential land uses. Residential land uses are not typically associated with heavy-duty diesel truck traffic, and thus the increase in daily trips attributable to residential land uses would mainly involve single passenger vehicles that are not typically considered to be sources of objectionable odors.

Because the proposed project does not directly involve land development, and the increase in project area traffic would be largely through increased use of single passenger vehicles rather than heavy-duty diesel trucks, the proposed project would not be anticipated to create objectionable odors in the project area, from what was previously anticipated in the City of Rocklin *General Plan* and *General Plan EIR*. Therefore, the proposed project would result in a ***less-than-significant*** impact related to objectionable odors.

VII. GREENHOUSE GAS EMISSIONS. <i>Would the project:</i>		Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than- Significant Impact	No Impact
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	✗	☐	☐
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	☐	✗	☐	☐

Discussion

- a,b. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. A project's GHG emissions are at a micro-scale relative to global emissions, but could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. Because the proposed project involves increased vehicle use in the area, the GHG emissions related to increased vehicle use in the area must be analyzed. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MT CO₂e/yr).

Previously, the City of Rocklin relied on methodology included in the California Air Resources Board's original *Climate Change Scoping Plan* for the analysis of potential impacts related to GHG emissions.¹⁰ The original Scoping Plan recommended an analysis methodology based on project-specific reductions in GHG emissions compared to a Business-As-Usual (BAU) scenario. The BAU scenarios were based off of GHG emissions projections for anticipated growth without the inclusion of measures that would reduce GHG emissions, such as improvements in vehicle fuel efficiency, energy efficiency, and the increased use of renewable energy sources for energy supply. However, on November 30, 2015, the California Supreme Court issued a decision in the *Center for Biological Diversity v. California Department of Fish and Wildlife* (Newhall Ranch) case, in which the court ruled that analysis based on BAU scenarios was insufficient to support conclusions that proposed projects would have less-than-significant impacts. In response to the Newhall Ranch Ruling, the City of Rocklin is relying on the proposed new guidance from the PCAPCD to determine the significance of proposed projects in regards to GHG

¹⁰ California Air Resources Board. *Climate Change Scoping Plan*. December 2008.

emissions. The City of Rocklin has determined that reliance on the proposed thresholds is justified as the BAU scenario is no longer considered adequate, and the City is within the PCAPCD's boundaries.

The proposed thresholds begin with a screening emission level of 1,100 MT CO₂e/yr. Any project below the 1,100 MT CO₂e/yr threshold is judged by the PCAPCD as having a less-than-significant impact on GHG emissions within the District and thus would not conflict with any state or regional GHG emissions reduction goals. Projects that would result in emissions above the 1,100 MT CO₂e/yr threshold would not necessarily result in substantial impacts, if certain efficiency thresholds are met. The efficiency thresholds, which are based on service populations and square footage, are presented in Table 3.

Table 3			
PCAPCD Operational Thresholds of Significance			
Efficiency Thresholds			
Residential (MT CO₂e/capita)		Non-Residential (MT CO₂e/1,000 sf)	
Urban	Rural	Urban	Rural
4.5	5.5	26.5	27.3
Source: Placer County Air Pollution Control District. CEQA Thresholds. Accessible at http://www.placer.ca.gov/departments/air/landuseceqa/ceqathresholds . Accessed October 2016.			

Projects that fall below the 1,100 MT CO₂e/yr threshold or meet the efficiency thresholds are considered to be in keeping with statewide GHG emissions reduction targets, which would ensure that the proposed project would not inhibit the State's achievement of GHG emissions reductions. Thus, projects which involve emissions below the 1,100 MT CO₂e/yr threshold or below the efficiency thresholds presented in Table 3, are considered to result in less-than-significant impacts in regards GHG emissions within the District and would not conflict with any state or regional GHG emissions reduction goals. Finally, the PCAPCD has also established a Bright Line Cap, which shall be the maximum limit for any proposed project. The Bright Line Cap is 10,000 MT CO₂e/yr for all types of projects.

The proposed increase to the daily traffic cap for the area would result in increased amounts of vehicle use in the area, which would contribute to increases of GHG emissions that are associated with global climate change. The proposed project's mobile emissions were modeled using the same assumptions and methodology presented in the Air Quality Section of this report. A comparison of GHG emissions from the baseline modeling scenario and the proposed project scenario is presented below in Table 4.

Table 4		
UnMitigated Operational Mobile GHG Emissions (MT CO₂e/yr)		
Baseline Emissions	Proposed Project Emissions	Difference
37,259	49,587	+12,328
Source: CalEEMod, October 2016 (See Appendix)		

The proposed project would include approximately 2,963,000 sf of non-residential structures. Therefore, given the proposed project's estimated mobile emissions, of 49,587

MT CO₂e/yr, the proposed project would result in an efficiency rate of 16.74 MT CO₂e/1,000 sf, which would be well below PCAPCD's urban non-residential efficiency threshold of 26.5 MT CO₂e/1,000 sf.

However, the difference of emissions between the baseline emissions, the emissions that would occur under the current trip cap for the project area, and the proposed project's emissions, the emissions that would result from increased vehicle use in the project area, would be 12,328 MT CO₂e/yr. The difference in emissions would therefore be above PCAPCD's Bright Line Cap of 10,000 MT CO₂e/yr. As a result, the proposed project would be considered to result in a ***potentially significant*** impact related to GHG emissions and global climate change.

Mitigation Measure(s)

The mitigation measure included in the Air Quality section of this report requires the development of an Air Quality Reduction Plan for any projects within the Northwest Rocklin Area that would increase mobile emissions beyond what was anticipated by the 2002 trip cap. Such Air Quality Reduction Plans would focus on the use of alternative modes of transportation, including non-motorized transportation, which would reduce the number of trips in the area and the vehicle trip lengths. Such reductions in the number and length of vehicle trips would result proportional reductions to GHG emissions in the project area. Therefore, application of mitigation measure III-1 would reduce the proposed project's potential impacts related to GHG emissions to a *less-than-significant* impact.

VII-1 Implement Mitigation Measure III-1

APPENDIX A

CALHEMOD MODELING RESULTS

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summary Report

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta

Placer County APCD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,373.00	1000sqft	31.52	1,373,000.00	0
General Light Industry	810.00	1000sqft	18.60	810,000.00	0
Regional Shopping Center	1,038.00	1000sqft	23.83	1,038,000.00	0
University/College (4Yr)	1,200.00	Student	5.06	220,556.96	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments

Only CalEEMod defaults were used.

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summary Report

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; only Trip Rates Changed

Area Mitigation -

Energy Mitigation -

Mobile Land Use Mitigation -

2.0 Peak Daily Emissions

Peak Daily Construction Emissions**Peak Daily Construction Emissions**

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2016	Architectural Coating	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
	Peak Daily Total	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions**Peak Daily Operational Emissions**

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summary Report

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	82.4310 S	4.0400e-003 S	0.4491 S	3.0000e-005 S	1.5900e-003 S	1.5900e-003 S	76.9245 S	4.0400e-003 S	0.4491 S	3.0000e-005 S	1.5900e-003 S	1.5900e-003 S
On-Site	Energy	1.7472 S	15.8832 S	13.3419 S	0.0953 S	1.2071 S	1.2071 S	1.6614 S	15.1034 S	12.6869 S	0.0906 S	1.1479 S	1.1479 S
Off-Site	Mobile	163.5245 S	265.7325 W	1,183.3932 W	2.7965 S	311.2267 W	84.2484 W	155.3307 S	249.9339 W	1,072.7063 W	2.4887 S	274.5379 W	74.3402 W
	Peak Daily Total	247.7027 S	281.6198 W	1,197.1842 W	2.8918 S	312.4354 W	85.4571 W	233.9166 S	265.0413 W	1,085.8423 W	2.5794 S	275.6873 W	75.4896 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Operational	2030	46,598.7432	62.8292	0.5573	48,335.5377	42,293.9674	62.5645	0.5529	44,022.8477
	Total								
	Significance Threshold								
	Exceed Significance?								

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Rocklin City-Wide Traffic Cap Original GDP 2016 Beta

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,373.00	1000sqft	31.52	1,373,000.00	0
General Light Industry	810.00	1000sqft	18.60	810,000.00	0
Regional Shopping Center	1,038.00	1000sqft	23.83	1,038,000.00	0
University/College (4Yr)	1,200.00	Student	5.06	220,556.96	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; only Trip Rates Changed

Area Mitigation -

Energy Mitigation -

Mobile Land Use Mitigation -

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Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	110.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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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	15.0399	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841
Energy	0.3189	2.8987	2.4349	0.0174		0.2203	0.2203		0.2203	0.2203	0.0000	8,037.474 4	8,037.474 4	0.5292	0.1548	8,096.838 8
Mobile	21.0112	40.9282	174.8821	0.4083	46.2114	0.2896	46.5010	12.3719	0.2694	12.6413	0.0000	37,195.39 00	37,195.39 00	2.5404	0.0000	37,258.90 10
Waste						0.0000	0.0000		0.0000	0.0000	728.7761	0.0000	728.7761	43.0694	0.0000	1,805.512 0
Water						0.0000	0.0000		0.0000	0.0000	162.0525	474.9712	637.0237	16.6899	0.4024	1,174.200 3
Total	36.3699	43.8272	177.3574	0.4257	46.2114	0.5101	46.7215	12.3719	0.4898	12.8617	890.8286	45,707.91 46	46,598.74 32	62.8292	0.5573	48,335.53 62

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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	14.0349	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841
Energy	0.3032	2.7564	2.3154	0.0165		0.2095	0.2095		0.2095	0.2095	0.0000	7,806.2757	7,806.2757	0.5189	0.1505	7,864.0850
Mobile	19.7000	38.5918	158.1348	0.3636	40.7585	0.2612	41.0196	10.9120	0.2429	11.1549	0.0000	33,121.8130	33,121.8130	2.2861	0.0000	33,178.9649
Waste						0.0000	0.0000		0.0000	0.0000	728.7761	0.0000	728.7761	43.0694	0.0000	1,805.5120
Water						0.0000	0.0000		0.0000	0.0000	162.0525	474.9712	637.0237	16.6899	0.4024	1,174.2003
Total	34.0381	41.3485	160.4906	0.3801	40.7585	0.4708	41.2292	10.9120	0.4525	11.3645	890.8286	41,403.1388	42,293.9674	62.5645	0.5529	44,022.8462

	ROG	NOx	CO	SO2	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	6.41	5.66	9.51	10.70	11.80	7.70	11.76	11.80	7.62	11.64	0.00	9.42	9.24	0.42	0.78	8.92

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,162,335; Non-Residential Outdoor: 1,720,778; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	241.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

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3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	19.7000	38.5918	158.1348	0.3636	40.7585	0.2612	41.0196	10.9120	0.2429	11.1549	0.0000	33,121.8130	33,121.8130	2.2861	0.0000	33,178.9649
Unmitigated	21.0112	40.9282	174.8821	0.4083	46.2114	0.2896	46.5010	12.3719	0.2694	12.6413	0.0000	37,195.3900	37,195.3900	2.5404	0.0000	37,258.9010

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6,156.00	1,069.20	550.80	13,513,166	11,918,612
General Office Building	24,302.10	3,377.58	1441.65	43,128,118	38,039,000
Regional Shopping Center	36,330.00	36,330.00	36330.00	63,697,564	56,181,252
University/College (4Yr)	2,700.00	1,560.00	0.00	5,433,714	4,792,536
Total	69,488.10	42,336.78	38,322.45	125,772,563	110,931,400

4.3 Trip Type Information

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	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
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
University/College (4Yr)	9.50	7.30	7.30	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

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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	4,805.6285	4,805.6285	0.4614	0.0955	4,845.6065
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,881.8969	4,881.8969	0.4687	0.0970	4,922.5093
NaturalGas Mitigated	0.3032	2.7564	2.3154	0.0165		0.2095	0.2095		0.2095	0.2095	0.0000	3,000.6471	3,000.6471	0.0575	0.0550	3,018.4785
NaturalGas Unmitigated	0.3189	2.8987	2.4349	0.0174		0.2203	0.2203		0.2203	0.2203	0.0000	3,155.5775	3,155.5775	0.0605	0.0579	3,174.3295

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					
General Light Industry	1.51713e+007	0.0818	0.7437	0.6247	4.4600e-003		0.0565	0.0565		0.0565	0.0565	0.0000	809.5983	809.5983	0.0155	0.0148	814.4094
General Office Building	2.27094e+007	0.1225	1.1132	0.9351	6.6800e-003		0.0846	0.0846		0.0846	0.0846	0.0000	1,211.8611	1,211.8611	0.0232	0.0222	1,219.0626
Regional Shopping Center	1.21965e+007	0.0658	0.5979	0.5022	3.5900e-003		0.0454	0.0454		0.0454	0.0454	0.0000	650.8517	650.8517	0.0125	0.0119	654.7194
University/College (4Yr)	9.05607e+006	0.0488	0.4439	0.3729	2.6600e-003		0.0337	0.0337		0.0337	0.0337	0.0000	483.2663	483.2663	9.2600e-003	8.8600e-003	486.1381
Total		0.3189	2.8987	2.4349	0.0174		0.2203	0.2203		0.2203	0.2203	0.0000	3,155.5775	3,155.5775	0.0605	0.0579	3,174.3295

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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					
General Light Industry	1.44152e+007	0.0777	0.7066	0.5936	4.2400e-003		0.0537	0.0537		0.0537	0.0537	0.0000	769.2481	769.2481	0.0147	0.0141	773.8194
General Office Building	2.16062e+007	0.1165	1.0591	0.8897	6.3500e-003		0.0805	0.0805		0.0805	0.0805	0.0000	1,152.9899	1,152.9899	0.0221	0.0211	1,159.8415
Regional Shopping Center	1.16054e+007	0.0626	0.5689	0.4779	3.4100e-003		0.0432	0.0432		0.0432	0.0432	0.0000	619.3062	619.3062	0.0119	0.0114	622.9864
University/College (4Yr)	8.60327e+006	0.0464	0.4217	0.3543	2.5300e-003		0.0321	0.0321		0.0321	0.0321	0.0000	459.1030	459.1030	8.8000e-003	8.4200e-003	461.8312
Total		0.3032	2.7564	2.3154	0.0165		0.2095	0.2095		0.2095	0.2095	0.0000	3,000.6471	3,000.6471	0.0575	0.0550	3,018.4785

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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			
General Light Industry	6.9741e+006	955.5994	0.0917	0.0190	963.5491
General Office Building	1.40595e+007	1,926.4521	0.1849	0.0383	1,942.4782
Regional Shopping Center	1.26013e+007	1,726.6478	0.1658	0.0343	1,741.0117
University/College (4Yr)	1.99383e+006	273.1976	0.0262	5.4300e-003	275.4704
Total		4,881.8969	0.4687	0.0970	4,922.5093

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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			
General Light Industry	6.90404e+006	945.9990	0.0908	0.0188	953.8688
General Office Building	1.38282e+007	1,894.7522	0.1819	0.0376	1,910.5146
Regional Shopping Center	1.23896e+007	1,697.6333	0.1630	0.0337	1,711.7559
University/College (4Yr)	1.95039e+006	267.2441	0.0257	5.3100e-003	269.4673
Total		4,805.6286	0.4614	0.0955	4,845.6065

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

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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	14.0349	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841
Unmitigated	15.0399	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841

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	1.5952					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	13.4410					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841
Total	15.0399	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	1.5952					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	12.4361					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-003	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841
Total	14.0349	3.6000e-004	0.0404	0.0000		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	0.0790	0.0790	2.0000e-004	0.0000	0.0841

7.0 Water Detail**7.1 Mitigation Measures Water**

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	637.0237	16.6899	0.4024	1,174.2003
Unmitigated	637.0237	16.6899	0.4024	1,174.2003

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	187.313 / 0	198.3032	6.1169	0.1469	394.9954
General Office Building	244.028 / 149.566	330.0748	7.9759	0.1928	586.9198
Regional Shopping Center	76.8873 / 47.1245	103.9984	2.5130	0.0607	184.9238
University/College (4Yr)	2.56932 / 4.01868	4.6473	0.0841	2.0500e-003	7.3613
Total		637.0237	16.6900	0.4024	1,174.2003

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	187.313 / 0	198.3032	6.1169	0.1469	394.9954
General Office Building	244.028 / 149.566	330.0748	7.9759	0.1928	586.9198
Regional Shopping Center	76.8873 / 47.1245	103.9984	2.5130	0.0607	184.9238
University/College (4Yr)	2.56932 / 4.01868	4.6473	0.0841	2.0500e-003	7.3613
Total		637.0237	16.6900	0.4024	1,174.2003

8.0 Waste Detail

8.1 Mitigation Measures Waste

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	728.7761	43.0694	0.0000	1,805.5120
Unmitigated	728.7761	43.0694	0.0000	1,805.5120

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1004.4	203.8841	12.0492	0.0000	505.1143
General Office Building	1276.89	259.1971	15.3181	0.0000	642.1499
Regional Shopping Center	1089.9	221.2399	13.0749	0.0000	548.1124
University/College (4Yr)	219	44.4550	2.6272	0.0000	110.1354
Total		728.7761	43.0694	0.0000	1,805.5120

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	1004.4	203.8841	12.0492	0.0000	505.1143
General Office Building	1276.89	259.1971	15.3181	0.0000	642.1499
Regional Shopping Center	1089.9	221.2399	13.0749	0.0000	548.1124
University/College (4Yr)	219	44.4550	2.6272	0.0000	110.1354
Total		728.7761	43.0694	0.0000	1,805.5120

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

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Annual

Equipment Type	Number
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11.0 Vegetation

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,373.00	1000sqft	31.52	1,373,000.00	0
General Light Industry	810.00	1000sqft	18.60	810,000.00	0
Regional Shopping Center	1,038.00	1000sqft	23.83	1,038,000.00	0
University/College (4Yr)	1,200.00	Student	5.06	220,556.96	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; only Trip Rates Changed

Area Mitigation -

Energy Mitigation -

Mobile Land Use Mitigation -

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	110.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.2107	0.0000	0.0000	0.2096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.2107	0.0000	0.0000	0.2096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

[illegible]

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Energy	1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469
Mobile	163.5245	246.2757	1,143.2431	2.7965	309.3762	1.8476	311.2238	82.5269	1.7187	84.2456		280,780.1415	280,780.1415	17.4346		281,216.0066
Total	247.7027	262.1629	1,157.0342	2.8918	309.3762	3.0563	312.4325	82.5269	2.9274	85.4543		299,840.9927	299,840.9927	17.8024	0.3494	300,390.1834

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	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Energy	1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.0947	18,124.0947	0.3474	0.3323	18,231.7971
Mobile	155.3307	232.7863	1,028.0817	2.4887	272.8698	1.6651	274.5350	72.7887	1.5486	74.3374		249,895.242	249,895.242	15.6501		250,286.4775
Total	233.9166	247.8937	1,041.2177	2.5794	272.8698	2.8146	275.6844	72.7887	2.6981	75.4868		268,020.2865	268,020.2865	16.0000	0.3323	268,519.3045

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	5.57	5.44	10.01	10.80	11.80	7.91	11.76	11.80	7.83	11.66	0.00	10.61	10.61	10.12	4.91	10.61

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,162,335; Non-Residential Outdoor: 1,720,778; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	241.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	155.3307	232.7863	1,028.0817	2.4887	272.8698	1.6651	274.5350	72.7887	1.5486	74.3374		249,895.242	249,895.242	15.6501		250,286.4775
Unmitigated	163.5245	246.2757	1,143.2431	2.7965	309.3762	1.8476	311.2238	82.5269	1.7187	84.2456		280,780.1415	280,780.1415	17.4346		281,216.0066

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6,156.00	1,069.20	550.80	13,513,166	11,918,612
General Office Building	24,302.10	3,377.58	1441.65	43,128,118	38,039,000
Regional Shopping Center	36,330.00	36,330.00	36330.00	63,697,564	56,181,252
University/College (4Yr)	2,700.00	1,560.00	0.00	5,433,714	4,792,536
Total	69,488.10	42,336.78	38,322.45	125,772,563	110,931,400

4.3 Trip Type Information

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
University/College (4Yr)	9.50	7.30	7.30	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.0947	18,124.0947	0.3474	0.3323	18,231.7971
NaturalGas Unmitigated	1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469

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					
General Light Industry	41565.2	0.4483	4.0750	3.4230	0.0245		0.3097	0.3097		0.3097	0.3097		4,890.0242	4,890.0242	0.0937	0.0897	4,919.0831
General Office Building	62217.6	0.6710	6.0998	5.1238	0.0366		0.4636	0.4636		0.4636	0.4636		7,319.7164	7,319.7164	0.1403	0.1342	7,363.2138
Regional Shopping Center	33415.1	0.3604	3.2760	2.7518	0.0197		0.2490	0.2490		0.2490	0.2490		3,931.1845	3,931.1845	0.0754	0.0721	3,954.5456
University/College (4Yr)	24811.1	0.2676	2.4325	2.0433	0.0146		0.1849	0.1849		0.1849	0.1849		2,918.9585	2,918.9585	0.0560	0.0535	2,936.3044
Total		1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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					
General Light Industry	39.4936	0.4259	3.8719	3.2524	0.0232		0.2943	0.2943		0.2943	0.2943		4,646.306 2	4,646.306 2	0.0891	0.0852	4,673.916 9
General Office Building	59.1951	0.6384	5.8034	4.8749	0.0348		0.4411	0.4411		0.4411	0.4411		6,964.130 4	6,964.130 4	0.1335	0.1277	7,005.514 7
Regional Shopping Center	31.7955	0.3429	3.1172	2.6185	0.0187		0.2369	0.2369		0.2369	0.2369		3,740.647 5	3,740.647 5	0.0717	0.0686	3,762.876 3
University/College (4Yr)	23.5706	0.2542	2.3108	1.9411	0.0139		0.1756	0.1756		0.1756	0.1756		2,773.010 6	2,773.010 6	0.0532	0.0508	2,789.489 2
Total		1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.09 47	18,124.09 47	0.3474	0.3323	18,231.79 71

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Unmitigated	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

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	8.7406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	73.6493					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0411	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Total	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	8.7406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.1428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0411	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Total	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

7.0 Water Detail**7.1 Mitigation Measures 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**Fire Pumps and Emergency Generators**

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Summer

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

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,373.00	1000sqft	31.52	1,373,000.00	0
General Light Industry	810.00	1000sqft	18.60	810,000.00	0
Regional Shopping Center	1,038.00	1000sqft	23.83	1,038,000.00	0
University/College (4Yr)	1,200.00	Student	5.06	220,556.96	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; only Trip Rates Changed

Area Mitigation -

Energy Mitigation -

Mobile Land Use Mitigation -

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	110.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO _{2e}
Year	lb/day										lb/day					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.2107	0.0000	0.0000	0.2096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.2107	0.0000	0.0000	0.2096	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

[illegible]

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Energy	1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469
Mobile	127.9291	265.7325	1,183.3932	2.5603	309.3762	1.8505	311.2267	82.5269	1.7215	84.2484		256,946.0546	256,946.0546	18.6431		257,412.1328
Total	212.1072	281.6198	1,197.1842	2.6556	309.3762	3.0592	312.4354	82.5269	2.9302	85.4571		276,006.9057	276,006.9057	19.0109	0.3494	276,586.3097

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	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Energy	1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.0947	18,124.0947	0.3474	0.3323	18,231.7971
Mobile	119.2361	249.9339	1,072.7063	2.2789	272.8698	1.6680	274.5379	72.7887	1.5514	74.3402		228,698.5977	228,698.5977	16.7959		229,118.4939
Total	197.8220	265.0413	1,085.8423	2.3695	272.8698	2.8175	275.6873	72.7887	2.7009	75.4896		246,823.6600	246,823.6600	17.1457	0.3323	247,351.3209

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	6.73	5.89	9.30	10.77	11.80	7.90	11.76	11.80	7.83	11.66	0.00	10.57	10.57	9.81	4.91	10.57

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 5,162,335; Non-Residential Outdoor: 1,720,778; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	241.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	119.2361	249.9339	1,072.706 3	2.2789	272.8698	1.6680	274.5379	72.7887	1.5514	74.3402		228,698.5 977	228,698.5 977	16.7959		229,118.4 939
Unmitigated	127.9291	265.7325	1,183.393 2	2.5603	309.3762	1.8505	311.2267	82.5269	1.7215	84.2484		256,946.0 546	256,946.0 546	18.6431		257,412.1 328

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	6,156.00	1,069.20	550.80	13,513,166	11,918,612
General Office Building	24,302.10	3,377.58	1441.65	43,128,118	38,039,000
Regional Shopping Center	36,330.00	36,330.00	36330.00	63,697,564	56,181,252
University/College (4Yr)	2,700.00	1,560.00	0.00	5,433,714	4,792,536
Total	69,488.10	42,336.78	38,322.45	125,772,563	110,931,400

4.3 Trip Type Information

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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
General Light Industry	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
University/College (4Yr)	9.50	7.30	7.30	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.0947	18,124.0947	0.3474	0.3323	18,231.7971
NaturalGas Unmitigated	1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469

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					
General Light Industry	41565.2	0.4483	4.0750	3.4230	0.0245		0.3097	0.3097		0.3097	0.3097		4,890.0242	4,890.0242	0.0937	0.0897	4,919.0831
General Office Building	62217.6	0.6710	6.0998	5.1238	0.0366		0.4636	0.4636		0.4636	0.4636		7,319.7164	7,319.7164	0.1403	0.1342	7,363.2138
Regional Shopping Center	33415.1	0.3604	3.2760	2.7518	0.0197		0.2490	0.2490		0.2490	0.2490		3,931.1845	3,931.1845	0.0754	0.0721	3,954.5456
University/College (4Yr)	24811.1	0.2676	2.4325	2.0433	0.0146		0.1849	0.1849		0.1849	0.1849		2,918.9585	2,918.9585	0.0560	0.0535	2,936.3044
Total		1.7472	15.8832	13.3419	0.0953		1.2071	1.2071		1.2071	1.2071		19,059.8836	19,059.8836	0.3653	0.3494	19,173.1469

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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					
General Light Industry	39.4936	0.4259	3.8719	3.2524	0.0232		0.2943	0.2943		0.2943	0.2943		4,646.306 2	4,646.306 2	0.0891	0.0852	4,673.916 9
General Office Building	59.1951	0.6384	5.8034	4.8749	0.0348		0.4411	0.4411		0.4411	0.4411		6,964.130 4	6,964.130 4	0.1335	0.1277	7,005.514 7
Regional Shopping Center	31.7955	0.3429	3.1172	2.6185	0.0187		0.2369	0.2369		0.2369	0.2369		3,740.647 5	3,740.647 5	0.0717	0.0686	3,762.876 3
University/College (4Yr)	23.5706	0.2542	2.3108	1.9411	0.0139		0.1756	0.1756		0.1756	0.1756		2,773.010 6	2,773.010 6	0.0532	0.0508	2,789.489 2
Total		1.6614	15.1034	12.6869	0.0906		1.1479	1.1479		1.1479	1.1479		18,124.09 47	18,124.09 47	0.3474	0.3323	18,231.79 71

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Unmitigated	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

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	8.7406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	73.6493					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0411	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Total	82.4310	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, 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	8.7406					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	68.1428					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0411	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299
Total	76.9245	4.0400e-003	0.4491	3.0000e-005		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003		0.9676	0.9676	2.5000e-003		1.0299

7.0 Water Detail**7.1 Mitigation Measures 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**Fire Pumps and Emergency Generators**

Rocklin City-Wide Traffic Cap Original GDP 2016 Beta - Placer County APCD Air District, Winter

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

Placer County APCD Air District, Mitigation Report

[illegible]

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

[illegible][illegible]

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

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	
No	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	0.00	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	7.48	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	1.56	1.56	1.56	1.57	1.56
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	6.24	5.71	9.58	10.95	9.83	9.84	0.00	10.95	10.95	10.01	0.00	10.95
Natural Gas	4.91	4.91	4.91	4.95	4.91	4.91	0.00	4.91	4.91	4.91	4.91	4.91
Water Indoor	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 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: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	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	0.10			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
Yes	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	0.12			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	4.50			
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	10.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.12			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	100.00
Yes	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	100.00
Yes	Use Low VOC Paint (Parking)	100.00
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
Yes	Exceed Title 24	5.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

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		
No	Use Reclaimed Water		
No	Use Grey Water		
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		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
---------------------	-------------

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	
--	--

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summary Report

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta

Placer County APCD, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,390.00	1000sqft	31.91	1,390,000.00	0
University/College (4Yr)	3,300.00	Student	13.92	606,531.65	0
General Light Industry	91.00	1000sqft	2.09	91,000.00	0
Apartments Mid Rise	417.00	Dwelling Unit	10.97	417,000.00	1193
Single Family Housing	370.00	Dwelling Unit	120.13	666,000.00	1058
Regional Shopping Center	1,482.00	1000sqft	34.02	1,482,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments

Only CalEEMod defaults were used.

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summary Report

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; Trip Rates and VMT changed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
Year	Phase	lb/day											
2016	Architectural Coating	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
	Peak Daily Total	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S	0.0000 S
	Air District Threshold												
	Exceed Significance?												

Peak Daily Operational Emissions

Peak Daily Operational Emissions

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		Unmitigated						Mitigated					
		ROG	NOX	CO	SO2	PM10	PM2.5	ROG	NOX	CO	SO2	PM10	PM2.5
	Operational Activity	lb/day											
On-Site	Area	1,318.7590 S	24.2732 S	1,552.1199 S	2.6970 S	208.8156 S	208.8156 S	108.2690 S	12.5017 S	70.3929 S	0.0785 S	1.3123 S	1.3123 S
On-Site	Energy	2.4883 S	22.3436 S	16.9682 S	0.1357 S	1.7192 S	1.7192 S	2.3688 S	21.2692 S	16.1446 S	0.1292 S	1.6366 S	1.6366 S
Off-Site	Mobile	211.0717 S	342.3296 W	1,513.6480 W	3.5645 S	396.0420 W	107.2139 W	200.6451 S	322.2260 W	1,372.8002 W	3.1728 S	349.3559 W	94.6059 W
	Peak Daily Total	1,532.3190 S	388.9464 W	3,082.7360 W	6.3972 S	606.5767 W	317.7487 W	311.2830 S	355.9969 W	1,459.3377 W	3.3805 S	352.3047 W	97.5547 W
	Air District Threshold												
	Exceed Significance?												

3.0 Annual GHG Emissions

Annual GHG

Annual GHG

		Unmitigated				Mitigated			
		CO2	CH4	N2O	CO2e	CO2	CH4	N2O	CO2e
GHG Activity	Year	MT/yr							
Construction	2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Operational	2030	62,582.0739	68.6879	0.6099	64,481.0328	56,260.5522	67.5971	0.5504	58,114.4918
	Total								
	Significance Threshold								
	Exceed Significance?								

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta

Placer County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,390.00	1000sqft	31.91	1,390,000.00	0
University/College (4Yr)	3,300.00	Student	13.92	606,531.65	0
General Light Industry	91.00	1000sqft	2.09	91,000.00	0
Apartments Mid Rise	417.00	Dwelling Unit	10.97	417,000.00	1193
Single Family Housing	370.00	Dwelling Unit	120.13	666,000.00	1058
Regional Shopping Center	1,482.00	1000sqft	34.02	1,482,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; Trip Rates and VMT changed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	330.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	HO_TL	7.50	7.45
tblVehicleTrips	HO_TL	7.50	7.45

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tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	ST_TR	6.39	6.50
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	ST_TR	9.91	9.00
tblVehicleTrips	SU_TR	5.86	6.50
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	SU_TR	8.62	9.00
tblVehicleTrips	WD_TR	6.65	6.50
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

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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	70.0634	1.0321	66.8412	0.1108		8.5792	8.5792		8.5792	8.5792	812.9377	350.5915	1,163.5292	0.7596	0.0639	1,201.5742
Energy	0.4541	4.0777	3.0967	0.0248		0.3138	0.3138		0.3138	0.3138	0.0000	10,488.2365	10,488.2365	0.6616	0.2015	10,564.8077
Mobile	28.1445	54.8632	233.1891	0.5434	61.4309	0.3860	61.8169	16.4465	0.3591	16.8056	0.0000	49,503.1265	49,503.1265	3.3854	0.0000	49,587.7620
Waste						0.0000	0.0000		0.0000	0.0000	839.6904	0.0000	839.6904	49.6243	0.0000	2,080.2974
Water						0.0000	0.0000		0.0000	0.0000	138.3896	449.1017	587.4913	14.2571	0.3445	1,046.5912
Total	98.6620	59.9729	303.1269	0.6789	61.4309	9.2790	70.7099	16.4465	9.2520	25.6985	1,791.0177	60,791.0562	62,582.0739	68.6879	0.6099	64,481.0324

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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	19.3800	0.5494	6.0904	3.3900e-003		0.0716	0.0716		0.0716	0.0716	0.0000	567.5496	567.5496	0.0201	0.0102	571.0995
Energy	0.4323	3.8816	2.9464	0.0236		0.2987	0.2987		0.2987	0.2987	0.0000	10,177.8810	10,177.8810	0.6484	0.1956	10,252.3834
Mobile	26.4015	51.7573	210.9262	0.4840	54.1821	0.3482	54.5303	14.5058	0.3238	14.8296	0.0000	44,087.9399	44,087.9399	3.0473	0.0000	44,164.1220
Waste						0.0000	0.0000		0.0000	0.0000	839.6904	0.0000	839.6904	49.6243	0.0000	2,080.2974
Water						0.0000	0.0000		0.0000	0.0000	138.3896	449.1017	587.4913	14.2571	0.3445	1,046.5912
Total	46.2138	56.1884	219.9630	0.5109	54.1821	0.7184	54.9005	14.5058	0.6941	15.1999	978.0800	55,282.4722	56,260.5522	67.5971	0.5504	58,114.4934

	ROG	NOx	CO	SO2	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	53.16	6.31	27.44	24.75	11.80	92.26	22.36	11.80	92.50	40.85	45.39	9.06	10.10	1.59	9.76	9.87

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

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Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 2,193,075; Residential Outdoor: 731,025; Non-Residential Indoor: 5,354,297; Non-Residential Outdoor: 1,784,766; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	329.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

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3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	26.4015	51.7573	210.9262	0.4840	54.1821	0.3482	54.5303	14.5058	0.3238	14.8296	0.0000	44,087.93 99	44,087.93 99	3.0473	0.0000	44,164.12 20
Unmitigated	28.1445	54.8632	233.1891	0.5434	61.4309	0.3860	61.8169	16.4465	0.3591	16.8056	0.0000	49,503.12 65	49,503.12 65	3.3854	0.0000	49,587.76 20

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartment Mid Rise	2,710.50	2,710.50	2710.50	7,709,371	6,799,665
General Light Industry	691.60	120.12	61.88	1,507,238	1,329,384
General Office Building	24,603.00	3,419.40	1459.50	43,354,394	38,238,576
Regional Shopping Center	51,870.00	51,870.00	51870.00	90,312,917	79,655,993
Single Family Housing	3,330.00	3,330.00	3330.00	9,471,391	8,353,767
University/College (4Yr)	7,425.00	4,290.00	0.00	14,839,733	13,088,644
Total	90,630.10	65,740.02	59,431.88	167,195,043	147,466,028

4.3 Trip Type Information

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	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
Apartments Mid Rise	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
General Light Industry	9.43	7.25	7.25	59.00	28.00	13.00	92	5	3
General Office Building	9.43	7.25	7.25	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.43	7.25	7.25	16.30	64.70	19.00	54	35	11
Single Family Housing	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
University/College (4Yr)	9.43	7.25	7.25	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Apartments Mid Rise	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Single Family Housing	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	5,899.5942	5,899.5942	0.5664	0.1172	5,948.6729
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,994.0647	5,994.0647	0.5754	0.1191	6,043.9293
NaturalGas Mitigated	0.4323	3.8816	2.9464	0.0236		0.2987	0.2987		0.2987	0.2987	0.0000	4,278.2868	4,278.2868	0.0820	0.0784	4,303.7105
NaturalGas Unmitigated	0.4541	4.0777	3.0967	0.0248		0.3138	0.3138		0.3138	0.3138	0.0000	4,494.1718	4,494.1718	0.0861	0.0824	4,520.8784

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	5.36937e+006	0.0290	0.2474	0.1053	1.5800e-003		0.0200	0.0200		0.0200	0.0200	0.0000	286.5299	286.5299	5.4900e-003	5.2500e-003	288.2326
General Light Industry	1.70443e+006	9.1900e-003	0.0836	0.0702	5.0000e-004		6.3500e-003	6.3500e-003		6.3500e-003	6.3500e-003	0.0000	90.9549	90.9549	1.7400e-003	1.6700e-003	91.4954
General Office Building	2.29906e+007	0.1240	1.1270	0.9467	6.7600e-003		0.0857	0.0857		0.0857	0.0857	0.0000	1,226.8660	1,226.8660	0.0235	0.0225	1,234.1566
Regional Shopping Center	1.74135e+007	0.0939	0.8536	0.7170	5.1200e-003		0.0649	0.0649		0.0649	0.0649	0.0000	929.2507	929.2507	0.0178	0.0170	934.7728
Single Family Housing	1.18355e+007	0.0638	0.5454	0.2321	3.4800e-003		0.0441	0.0441		0.0441	0.0441	0.0000	631.5880	631.5880	0.0121	0.0116	635.3412
University/College (4Yr)	2.49042e+007	0.1343	1.2208	1.0255	7.3200e-003		0.0928	0.0928		0.0928	0.0928	0.0000	1,328.9824	1,328.9824	0.0255	0.0244	1,336.8799
Total		0.4541	4.0777	3.0967	0.0248		0.3137	0.3137		0.3137	0.3137	0.0000	4,494.1718	4,494.1718	0.0861	0.0824	4,520.8784

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	5.15692e+006	0.0278	0.2376	0.1011	1.5200e-003		0.0192	0.0192		0.0192	0.0192	0.0000	275.1930	275.1930	5.2700e-003	5.0500e-003	276.8284
General Light Industry	1.61948e+006	8.7300e-003	0.0794	0.0667	4.8000e-004		6.0300e-003	6.0300e-003		6.0300e-003	6.0300e-003	0.0000	86.4217	86.4217	1.6600e-003	1.5800e-003	86.9353
General Office Building	2.18737e+007	0.1180	1.0722	0.9007	6.4300e-003		0.0815	0.0815		0.0815	0.0815	0.0000	1,167.2658	1,167.2658	0.0224	0.0214	1,174.2023
Regional Shopping Center	1.65695e+007	0.0894	0.8122	0.6823	4.8700e-003		0.0617	0.0617		0.0617	0.0617	0.0000	884.2117	884.2117	0.0170	0.0162	889.4661
Single Family Housing	1.12934e+007	0.0609	0.5204	0.2214	3.3200e-003		0.0421	0.0421		0.0421	0.0421	0.0000	602.6613	602.6613	0.0116	0.0111	606.2426
University/College (4Yr)	2.3659e+007	0.1276	1.1598	0.9742	6.9600e-003		0.0881	0.0881		0.0881	0.0881	0.0000	1,262.5333	1,262.5333	0.0242	0.0232	1,270.0359
Total		0.4323	3.8816	2.9464	0.0236		0.2987	0.2987		0.2987	0.2987	0.0000	4,278.2868	4,278.2868	0.0820	0.0784	4,303.7105

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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			
Apartments Mid Rise	1.90237e+006	260.6651	0.0250	5.1800e-003	262.8336
General Light Industry	783510	107.3575	0.0103	2.1300e-003	108.2506
General Office Building	1.42336e+007	1,950.3047	0.1872	0.0387	1,966.5293
Regional Shopping Center	1.79915e+007	2,465.2139	0.2367	0.0490	2,485.7220
Single Family Housing	3.35153e+006	459.2301	0.0441	9.1200e-003	463.0505
University/College (4Yr)	5.48305e+006	751.2935	0.0721	0.0149	757.5435
Total		5,994.0648	0.5754	0.1191	6,043.9293

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.89104e+006	259.1123	0.0249	5.1500e-003	261.2678
General Light Industry	775639	106.2789	0.0102	2.1100e-003	107.1630
General Office Building	1.39994e+007	1,918.2123	0.1842	0.0381	1,934.1699
Regional Shopping Center	1.76892e+007	2,423.7885	0.2327	0.0481	2,443.9520
Single Family Housing	3.3373e+006	457.2810	0.0439	9.0800e-003	461.0851
University/College (4Yr)	5.36356e+006	734.9213	0.0706	0.0146	741.0351
Total		5,899.5942	0.5664	0.1172	5,948.6729

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	19.3800	0.5494	6.0904	3.3900e-003		0.0716	0.0716		0.0716	0.0716	0.0000	567.5496	567.5496	0.0201	0.0102	571.0995
Unmitigated	70.0634	1.0321	66.8412	0.1108		8.5792	8.5792		8.5792	8.5792	812.9377	350.5915	1,163.529 2	0.7596	0.0639	1,201.574 2

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	2.3321					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	18.1705					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	49.3813	0.9644	60.9558	0.1104		8.5466	8.5466		8.5466	8.5466	812.9377	340.9342	1,153.871 9	0.7502	0.0639	1,191.682 3
Landscaping	0.1796	0.0677	5.8854	3.1000e-004		0.0326	0.0326		0.0326	0.0326	0.0000	9.6573	9.6573	9.3800e-003	0.0000	9.8918
Total	70.0634	1.0321	66.8412	0.1107		8.5792	8.5792		8.5792	8.5792	812.9377	350.5915	1,163.529 2	0.7596	0.0639	1,201.574 2

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	2.3321					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	16.8119					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0564	0.4817	0.2050	3.0700e-003		0.0390	0.0390		0.0390	0.0390	0.0000	557.8924	557.8924	0.0107	0.0102	561.2076
Landscaping	0.1796	0.0677	5.8854	3.1000e-004		0.0326	0.0326		0.0326	0.0326	0.0000	9.6573	9.6573	9.3800e-003	0.0000	9.8918
Total	19.3800	0.5494	6.0904	3.3800e-003		0.0716	0.0716		0.0716	0.0716	0.0000	567.5496	567.5496	0.0201	0.0102	571.0995

7.0 Water Detail**7.1 Mitigation Measures Water**

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	587.4913	14.2571	0.3445	1,046.5912
Unmitigated	587.4913	14.2571	0.3445	1,046.5912

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	27.1692 / 17.1284	36.9778	0.8880	0.0215	65.5758
General Light Industry	21.0437 / 0	22.2785	0.6872	0.0165	44.3760
General Office Building	247.05 / 151.418	334.1617	8.0747	0.1952	594.1868
Regional Shopping Center	109.775 / 67.2817	148.4832	3.5880	0.0867	264.0241
Single Family Housing	24.107 / 15.1979	32.8100	0.7879	0.0191	58.1848
University/College (4Yr)	7.06563 / 11.0514	12.7802	0.2313	5.6500e-003	20.2437
Total		587.4913	14.2571	0.3446	1,046.5912

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	27.1692 / 17.1284	36.9778	0.8880	0.0215	65.5758
General Light Industry	21.0437 / 0	22.2785	0.6872	0.0165	44.3760
General Office Building	247.05 / 151.418	334.1617	8.0747	0.1952	594.1868
Regional Shopping Center	109.775 / 67.2817	148.4832	3.5880	0.0867	264.0241
Single Family Housing	24.107 / 15.1979	32.8100	0.7879	0.0191	58.1848
University/College (4Yr)	7.06563 / 11.0514	12.7802	0.2313	5.6500e-003	20.2437
Total		587.4913	14.2571	0.3446	1,046.5912

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	839.6904	49.6243	0.0000	2,080.297 4
Unmitigated	839.6904	49.6243	0.0000	2,080.297 4

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	191.82	38.9377	2.3012	0.0000	96.4666
General Light Industry	112.84	22.9055	1.3537	0.0000	56.7474
General Office Building	1292.7	262.4064	15.5078	0.0000	650.1008
Regional Shopping Center	1556.1	315.8742	18.6676	0.0000	782.5651
Single Family Housing	380.88	77.3152	4.5692	0.0000	191.5451
University/College (4Yr)	602.25	122.2513	7.2249	0.0000	302.8724
Total		839.6904	49.6243	0.0000	2,080.297 4

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	191.82	38.9377	2.3012	0.0000	96.4666
General Light Industry	112.84	22.9055	1.3537	0.0000	56.7474
General Office Building	1292.7	262.4064	15.5078	0.0000	650.1008
Regional Shopping Center	1556.1	315.8742	18.6676	0.0000	782.5651
Single Family Housing	380.88	77.3152	4.5692	0.0000	191.5451
University/College (4Yr)	602.25	122.2513	7.2249	0.0000	302.8724
Total		839.6904	49.6243	0.0000	2,080.2974

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

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Annual

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

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta

Placer County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,390.00	1000sqft	31.91	1,390,000.00	0
University/College (4Yr)	3,300.00	Student	13.92	606,531.65	0
General Light Industry	91.00	1000sqft	2.09	91,000.00	0
Apartments Mid Rise	417.00	Dwelling Unit	10.97	417,000.00	1193
Single Family Housing	370.00	Dwelling Unit	120.13	666,000.00	1058
Regional Shopping Center	1,482.00	1000sqft	34.02	1,482,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; Trip Rates and VMT changed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	330.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	HO_TL	7.50	7.45
tblVehicleTrips	HO_TL	7.50	7.45

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	ST_TR	6.39	6.50
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	ST_TR	9.91	9.00
tblVehicleTrips	SU_TR	5.86	6.50
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	SU_TR	8.62	9.00
tblVehicleTrips	WD_TR	6.65	6.50
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
2016	0.0000	0.0000	0.0000	0.0000	0.0000	0.2158	0.0000	0.0000	0.2144	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.2158	0.0000	0.0000	0.2144	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction

[illegible][illegible]

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982
Energy	2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857
Mobile	164.5118	342.3296	1,513.6480	3.2635	393.6776	2.3644	396.0420	105.0145	2.1994	107.2139		327,518.6240	327,518.6240	23.8181		328,114.0760
Total	1,485.7591	388.9464	3,082.7360	6.0962	393.6776	212.8991	606.5767	105.0145	212.7342	317.7487	21,856.3521	363,948.2167	385,804.5687	44.6231	2.2168	387,580.7599

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	108.2690	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.5755	15,117.5755	0.4024	0.2750	15,209.5818
Energy	2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780
Mobile	153.4501	322.2260	1,372.8002	2.9054	347.2236	2.1322	349.3559	92.6228	1.9831	94.6059		291,574.0713	291,574.0713	21.4674		292,110.7571
Total	264.0879	355.9969	1,459.3377	3.1131	347.2236	5.0811	352.3047	92.6228	4.9320	97.5547	0.0000	332,532.7639	332,532.7639	22.3651	0.7487	333,315.0169

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	82.23	8.47	52.66	48.93	11.80	97.61	41.92	11.80	97.68	69.30	100.00	8.63	13.81	49.88	66.22	14.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,193,075; Residential Outdoor: 731,025; Non-Residential Indoor: 5,354,297; Non-Residential Outdoor: 1,784,766; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	329.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	153.4501	322.2260	1,372.8002	2.9054	347.2236	2.1322	349.3559	92.6228	1.9831	94.6059		291,574.0713	291,574.0713	21.4674		292,110.7571
Unmitigated	164.5118	342.3296	1,513.6480	3.2635	393.6776	2.3644	396.0420	105.0145	2.1994	107.2139		327,518.6240	327,518.6240	23.8181		328,114.0760

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,710.50	2,710.50	2710.50	7,709,371	6,799,665
General Light Industry	691.60	120.12	61.88	1,507,238	1,329,384
General Office Building	24,603.00	3,419.40	1459.50	43,354,394	38,238,576
Regional Shopping Center	51,870.00	51,870.00	51870.00	90,312,917	79,655,993
Single Family Housing	3,330.00	3,330.00	3330.00	9,471,391	8,353,767
University/College (4Yr)	7,425.00	4,290.00	0.00	14,839,733	13,088,644
Total	90,630.10	65,740.02	59,431.88	167,195,043	147,466,028

4.3 Trip Type Information

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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
Apartments Mid Rise	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
General Light Industry	9.43	7.25	7.25	59.00	28.00	13.00	92	5	3
General Office Building	9.43	7.25	7.25	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.43	7.25	7.25	16.30	64.70	19.00	54	35	11
Single Family Housing	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
University/College (4Yr)	9.43	7.25	7.25	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Apartments Mid Rise	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Single Family Housing	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780
NaturalGas Unmitigated	2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	14710.6	0.1586	1.3557	0.5769	8.6500e-003		0.1096	0.1096		0.1096	0.1096		1,730.6582	1,730.6582	0.0332	0.0317	1,740.9426
General Light Industry	4669.67	0.0504	0.4578	0.3846	2.7500e-003		0.0348	0.0348		0.0348	0.0348		549.3731	549.3731	0.0105	0.0101	552.6377
General Office Building	62987.9	0.6793	6.1753	5.1872	0.0371		0.4693	0.4693		0.4693	0.4693		7,410.3465	7,410.3465	0.1420	0.1359	7,454.3825
Regional Shopping Center	47708.2	0.5145	4.6773	3.9289	0.0281		0.3555	0.3555		0.3555	0.3555		5,612.7317	5,612.7317	0.1076	0.1029	5,646.0853
Single Family Housing	32426.1	0.3497	2.9883	1.2716	0.0191		0.2416	0.2416		0.2416	0.2416		3,814.8306	3,814.8306	0.0731	0.0699	3,837.5002
University/College (4Yr)	68230.7	0.7358	6.6893	5.6190	0.0401		0.5084	0.5084		0.5084	0.5084		8,027.1360	8,027.1360	0.1539	0.1472	8,074.8373
Total		2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	14.1286	0.1524	1.3020	0.5541	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,662.1830	1,662.1830	0.0319	0.0305	1,672.0605
General Light Industry	4.43694	0.0479	0.4350	0.3654	2.6100e-003		0.0331	0.0331		0.0331	0.0331		521.9924	521.9924	0.0100	9.5700e-003	525.0944
General Office Building	59.928	0.6463	5.8753	4.9353	0.0353		0.4465	0.4465		0.4465	0.4465		7,050.3578	7,050.3578	0.1351	0.1293	7,092.2545
Regional Shopping Center	45.3959	0.4896	4.4506	3.7385	0.0267		0.3382	0.3382		0.3382	0.3382		5,340.6933	5,340.6933	0.1024	0.0979	5,372.4304
Single Family Housing	30.9409	0.3337	2.8514	1.2134	0.0182		0.2305	0.2305		0.2305	0.2305		3,640.1115	3,640.1115	0.0698	0.0667	3,661.7428
University/College (4Yr)	64.8191	0.6990	6.3548	5.3381	0.0381		0.4830	0.4830		0.4830	0.4830		7,625.7792	7,625.7792	0.1462	0.1398	7,671.0954
Total		2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	108.2690	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.5755	15,117.5755	0.4024	0.2750	15,209.5818
Unmitigated	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982

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	12.7788					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	99.5642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,204.4208	23.5210	1,486.7267	2.6935		208.4533	208.4533		208.4533	208.4533	21,856.3521	9,166.2353	31,022.5874	20.1698	1.7192	32,039.1438
Landscaping	1.9951	0.7523	65.3932	3.4800e-003		0.3623	0.3623		0.3623	0.3623		118.2813	118.2813	0.1149		121.1544
Total	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	12.7788					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	92.1201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.3749	11.7495	4.9998	0.0750		0.9500	0.9500		0.9500	0.9500	0.0000	14,999.29 41	14,999.29 41	0.2875	0.2750	15,088.42 74
Landscaping	1.9951	0.7523	65.3932	3.4800e-003		0.3623	0.3623		0.3623	0.3623		118.2813	118.2813	0.1149		121.1544
Total	108.2691	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.57 55	15,117.57 55	0.4024	0.2750	15,209.58 18

7.0 Water Detail**7.1 Mitigation Measures 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

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Winter

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

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta

Placer County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1,390.00	1000sqft	31.91	1,390,000.00	0
University/College (4Yr)	3,300.00	Student	13.92	606,531.65	0
General Light Industry	91.00	1000sqft	2.09	91,000.00	0
Apartments Mid Rise	417.00	Dwelling Unit	10.97	417,000.00	1193
Single Family Housing	370.00	Dwelling Unit	120.13	666,000.00	1058
Regional Shopping Center	1,482.00	1000sqft	34.02	1,482,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	74
Climate Zone	2			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	302.08	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

Project Characteristics - Progress towards RPS

Land Use - *

Construction Phase - Construction emissions not modeled

Vehicle Trips - Fehr and Peers; Trip Rates and VMT changed

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	330.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	302.08
tblProjectCharacteristics	OperationalYear	2018	2030
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CC_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CNW_TL	7.30	7.25
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	CW_TL	9.50	9.43
tblVehicleTrips	HO_TL	7.50	7.45
tblVehicleTrips	HO_TL	7.50	7.45

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HS_TL	7.30	7.25
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	HW_TL	10.80	10.72
tblVehicleTrips	ST_TR	6.39	6.50
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	ST_TR	9.91	9.00
tblVehicleTrips	SU_TR	5.86	6.50
tblVehicleTrips	SU_TR	25.24	35.00
tblVehicleTrips	SU_TR	8.62	9.00
tblVehicleTrips	WD_TR	6.65	6.50
tblVehicleTrips	WD_TR	6.97	7.60
tblVehicleTrips	WD_TR	11.03	17.70
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.00
tblVehicleTrips	WD_TR	1.71	2.25

2.0 Emissions Summary

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982
Energy	2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857
Mobile	211.0717	317.5746	1,460.0776	3.5645	393.6776	2.3606	396.0382	105.0145	2.1958	107.2103		357,894.3155	357,894.3155	22.2588		358,450.7845
Total	1,532.3190	364.1914	3,029.1657	6.3972	393.6776	212.8953	606.5729	105.0145	212.7306	317.7451	21,856.3521	394,323.9082	416,180.2602	43.0638	2.2168	417,917.4684

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	108.2690	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.5755	15,117.5755	0.4024	0.2750	15,209.5818
Energy	2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780
Mobile	200.6451	300.4095	1,313.5361	3.1728	347.2236	2.1284	349.3520	92.6228	1.9794	94.6022		318,593.6257	318,593.6257	19.9880		319,093.3268
Total	311.2830	334.1804	1,400.0736	3.3805	347.2236	5.0773	352.3009	92.6228	4.9283	97.5511	0.0000	359,552.3183	359,552.3183	20.8857	0.7487	360,297.5866

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	79.69	8.24	53.78	47.16	11.80	97.62	41.92	11.80	97.68	69.30	100.00	8.82	13.61	51.50	66.22	13.79

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	12/31/2016	12/30/2016	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 2,193,075; Residential Outdoor: 731,025; Non-Residential Indoor: 5,354,297; Non-Residential Outdoor: 1,784,766; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
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
Architectural Coating	1	329.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

3.2 Architectural Coating - 2016

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

3.2 Architectural Coating - 2016**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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

4.1 Mitigation Measures Mobile

Increase Diversity

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	200.6451	300.4095	1,313.5361	3.1728	347.2236	2.1284	349.3520	92.6228	1.9794	94.6022		318,593.6257	318,593.6257	19.9880		319,093.3268
Unmitigated	211.0717	317.5746	1,460.0776	3.5645	393.6776	2.3606	396.0382	105.0145	2.1958	107.2103		357,894.3155	357,894.3155	22.2588		358,450.7845

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	2,710.50	2,710.50	2710.50	7,709,371	6,799,665
General Light Industry	691.60	120.12	61.88	1,507,238	1,329,384
General Office Building	24,603.00	3,419.40	1459.50	43,354,394	38,238,576
Regional Shopping Center	51,870.00	51,870.00	51870.00	90,312,917	79,655,993
Single Family Housing	3,330.00	3,330.00	3330.00	9,471,391	8,353,767
University/College (4Yr)	7,425.00	4,290.00	0.00	14,839,733	13,088,644
Total	90,630.10	65,740.02	59,431.88	167,195,043	147,466,028

4.3 Trip Type Information

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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
Apartments Mid Rise	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
General Light Industry	9.43	7.25	7.25	59.00	28.00	13.00	92	5	3
General Office Building	9.43	7.25	7.25	33.00	48.00	19.00	77	19	4
Regional Shopping Center	9.43	7.25	7.25	16.30	64.70	19.00	54	35	11
Single Family Housing	10.72	7.25	7.45	42.60	21.00	36.40	86	11	3
University/College (4Yr)	9.43	7.25	7.25	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
University/College (4Yr)	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
General Light Industry	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Apartments Mid Rise	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Single Family Housing	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173
Regional Shopping Center	0.533428	0.036578	0.215986	0.121877	0.016498	0.004705	0.023723	0.010655	0.000859	0.000333	0.031540	0.000644	0.003173

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780
NaturalGas Unmitigated	2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	14710.6	0.1586	1.3557	0.5769	8.6500e-003		0.1096	0.1096		0.1096	0.1096		1,730.6582	1,730.6582	0.0332	0.0317	1,740.9426
General Light Industry	4669.67	0.0504	0.4578	0.3846	2.7500e-003		0.0348	0.0348		0.0348	0.0348		549.3731	549.3731	0.0105	0.0101	552.6377
General Office Building	62987.9	0.6793	6.1753	5.1872	0.0371		0.4693	0.4693		0.4693	0.4693		7,410.3465	7,410.3465	0.1420	0.1359	7,454.3825
Regional Shopping Center	47708.2	0.5145	4.6773	3.9289	0.0281		0.3555	0.3555		0.3555	0.3555		5,612.7317	5,612.7317	0.1076	0.1029	5,646.0853
Single Family Housing	32426.1	0.3497	2.9883	1.2716	0.0191		0.2416	0.2416		0.2416	0.2416		3,814.8306	3,814.8306	0.0731	0.0699	3,837.5002
University/College (4Yr)	68230.7	0.7358	6.6893	5.6190	0.0401		0.5084	0.5084		0.5084	0.5084		8,027.1360	8,027.1360	0.1539	0.1472	8,074.8373
Total		2.4883	22.3436	16.9682	0.1357		1.7192	1.7192		1.7192	1.7192		27,145.0761	27,145.0761	0.5203	0.4977	27,306.3857

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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					
Apartments Mid Rise	14.1286	0.1524	1.3020	0.5541	8.3100e-003		0.1053	0.1053		0.1053	0.1053		1,662.1830	1,662.1830	0.0319	0.0305	1,672.0605
General Light Industry	4.43694	0.0479	0.4350	0.3654	2.6100e-003		0.0331	0.0331		0.0331	0.0331		521.9924	521.9924	0.0100	9.5700e-003	525.0944
General Office Building	59.928	0.6463	5.8753	4.9353	0.0353		0.4465	0.4465		0.4465	0.4465		7,050.3578	7,050.3578	0.1351	0.1293	7,092.2545
Regional Shopping Center	45.3959	0.4896	4.4506	3.7385	0.0267		0.3382	0.3382		0.3382	0.3382		5,340.6933	5,340.6933	0.1024	0.0979	5,372.4304
Single Family Housing	30.9409	0.3337	2.8514	1.2134	0.0182		0.2305	0.2305		0.2305	0.2305		3,640.1115	3,640.1115	0.0698	0.0667	3,661.7428
University/College (4Yr)	64.8191	0.6990	6.3548	5.3381	0.0381		0.4830	0.4830		0.4830	0.4830		7,625.7792	7,625.7792	0.1462	0.1398	7,671.0954
Total		2.3688	21.2692	16.1446	0.1292		1.6366	1.6366		1.6366	1.6366		25,841.1172	25,841.1172	0.4953	0.4738	25,994.6780

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

Use only Natural Gas Hearths

Use Low VOC Cleaning Supplies

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	108.2690	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.5755	15,117.5755	0.4024	0.2750	15,209.5818
Unmitigated	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982

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	12.7788					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	99.5642					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1,204.4208	23.5210	1,486.7267	2.6935		208.4533	208.4533		208.4533	208.4533	21,856.3521	9,166.2353	31,022.5874	20.1698	1.7192	32,039.1438
Landscaping	1.9951	0.7523	65.3932	3.4800e-003		0.3623	0.3623		0.3623	0.3623		118.2813	118.2813	0.1149		121.1544
Total	1,318.7590	24.2732	1,552.1199	2.6970		208.8156	208.8156		208.8156	208.8156	21,856.3521	9,284.5166	31,140.8687	20.2847	1.7192	32,160.2982

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, 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	12.7788					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	92.1201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.3749	11.7495	4.9998	0.0750		0.9500	0.9500		0.9500	0.9500	0.0000	14,999.29 41	14,999.29 41	0.2875	0.2750	15,088.42 74
Landscaping	1.9951	0.7523	65.3932	3.4800e-003		0.3623	0.3623		0.3623	0.3623		118.2813	118.2813	0.1149		121.1544
Total	108.2691	12.5017	70.3929	0.0785		1.3123	1.3123		1.3123	1.3123	0.0000	15,117.57 55	15,117.57 55	0.4024	0.2750	15,209.58 18

7.0 Water Detail**7.1 Mitigation Measures 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

Rocklin City-Wide Traffic Cap Proposed GDP 2016 Beta - Placer County APCD Air District, Summer

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

Placer County APCD Air District, Mitigation Report

[illegible]

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

[illegible][illegible]

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

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input	Mitigation Input
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	PM2.5 Reduction	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	PM2.5 Reduction	
No	Water Exposed Area	PM10 Reduction	PM2.5 Reduction	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	Vehicle Speed (mph)	
No	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	0.00	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	7.48	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	1.58	1.58	1.57	1.57	1.58
Hearth	99.89	50.05	99.66	97.22	99.54	99.54	100.00	-63.64	51.65	98.58	84.00	52.91
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	6.19	5.66	9.55	10.94	9.80	9.82	0.00	10.94	10.94	9.99	0.00	10.94
Natural Gas	4.80	4.81	4.85	4.77	4.80	4.80	0.00	4.80	4.80	4.80	4.79	4.80
Water Indoor	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 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: Suburban Center

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
Yes	Land Use	Increase Diversity	0.30	0.66		
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	0.10			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
Yes	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	0.12			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	4.50			
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	10.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.12			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
Yes	Only Natural Gas Hearth	
No	No Hearth	
Yes	Use Low VOC Cleaning Supplies	
Yes	Use Low VOC Paint (Residential Interior)	100.00
Yes	Use Low VOC Paint (Residential Exterior)	100.00
Yes	Use Low VOC Paint (Non-residential Interior)	100.00
Yes	Use Low VOC Paint (Non-residential Exterior)	100.00
Yes	Use Low VOC Paint (Parking)	100.00
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
Yes	Exceed Title 24	5.00	
No	Install High Efficiency Lighting	0.00	
No	On-site Renewable	0.00	0.00

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		
No	Use Reclaimed Water		
No	Use Grey Water		
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		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

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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