

**APPENDIX A**  
**Air Quality Study**



# Silver Creek Mixed-Use Development

## Air Quality Study

*prepared for*

**Circlepoint**

46 South First Street

San Jose, California 95113

Contact: Alex Casbara, Project Manager

*prepared with the assistance of*

**Rincon Consultants, Inc.**

449 15<sup>th</sup> Street, Suite 303

Oakland, California 94612

**April 2018**

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# Table of Contents

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1	Project Description .....	1
1.1	Introduction .....	1
1.2	Project Summary.....	1
2	Air Quality Background .....	2
2.1	Background .....	2
3	Impact Analysis .....	6
3.1	Methodology and Significance Thresholds .....	6
3.2	Project Impacts .....	9
3.3	Recommendations to Reduce Air Quality Impacts .....	14
3.4	Conclusions .....	15
4	References .....	18

## Tables

Table 1	Federal and Ambient Air Quality Standards .....	3
Table 2	Ambient Air Quality at the Nearest Monitoring Stations .....	4
Table 3	Air Quality Thresholds of Significance .....	7
Table 4	Project Construction Emissions .....	10
Table 5	Project Operational Average Daily Emissions .....	11
Table 6	Project Operational Maximum Annual Emissions .....	11
Table 7	Screening Data: Cancer Risk and Particulate Matter Concentrations .....	12
Table 8	Stationary Sources within 1,000 Feet .....	13
Table 9	Health Risks after Recommendation AQ-1 .....	16

## Appendices

Appendix A	California Emissions Estimator Model (CalEEMod) Results
Appendix B	Bay Area Air Quality Management District Multiplier Tools
Appendix C	Health Risk Assessment Mitigation Calculations

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# 1 Project Description

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## 1.1 Introduction

This study is an analysis of the potential air quality impacts of a proposed project located at 1936 Alum Rock Avenue in San Jose, California. The study has been prepared by Rincon Consultants, Inc. under contract to Circlepoint for use in support of the environmental documentation being prepared pursuant to the California Environmental Quality Act (CEQA). This analysis considers both temporary impacts that would result from project construction and long-term impacts associated with operation of the project.

## 1.2 Project Summary

### Existing Site Conditions

The project site encompasses approximately 1.49 acres (64,904 square feet [sf]) on a generally level, rectangular site that contains a vacant aquarium building and an outdoor storage area. The vacant building would be demolished as part of the project. Adjacent uses include mixed-use development to the west, an outdoor storage area to the east, single family residences to the south, and commercial development to the north across Alum Rock Avenue.

### Project Description

The proposed project involves construction of a four story charter school located along the site's Alum Rock Avenue frontage and a five story residential project with four levels of residential units over one level of shared parking behind the school building. The charter school would be approximately 39,000 sf with three levels and a partial fourth level containing an indoor area. The charter school would include 12 classrooms, eight specialized classrooms such as a music room, offices, and a multi-purpose room/gym. The residential portion of the proposed project would include 94 residential units on four levels including 34 one-bedroom units, 48 two-bedroom units, and 12 three-bedroom units. The ground floor level would include a parking garage with shared parking for the charter school and residents. The parking garage would include 30 parking stalls for the school and 50 parking stalls for residents. Primary access to the site would be via a driveway from Alum Rock Avenue with secondary access to the parking garage available from Tierra Encantada Way. All on-site structures would be demolished to accommodate the proposed project.

## 2 Air Quality Background

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### 2.1 Background

#### Local Climate and Meteorology

The project site is located in the San Francisco Bay Area Air Basin (SFBAAB). Air quality in the SFBAAB is affected by the emission sources located in the region, as well as by natural factors. Atmospheric conditions such as wind speed and direction, air temperature gradients, and local and regional topography influence air quality. The SFBAAB is affected by a Mediterranean climate of warm, dry summers and cool, damp winters. Topographical features, the location of the Pacific high-pressure system, and varying circulation patterns resulting from temperature gradients affect the speed and direction of local winds. The winds play a major role in the dispersion of pollutants. Strong winds can carry pollutants far from their source; a lack of wind will allow pollutants to concentrate in an area.

Air pollutant emissions within the SFBAAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include sources such as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment such as when high winds suspend fine dust particles.

#### Air Pollutants of Primary Concern

The federal and State governments have established ambient air quality standards for the protection of public health. The United State Environmental Protection Agency (U.S. EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the State equivalent in the California EPA (CalEPA). County-level Air Quality Management Districts (AQMDs) provide local management of air quality. CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local AQMDs are responsible for enforcing standards and regulating stationary sources. CARB has established 15 air basins statewide, including SFBAAB.

The U.S. EPA has set primary national ambient air quality standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter with a diameter of up to ten microns (PM<sub>10</sub>) and up to 2.5 microns (PM<sub>2.5</sub>), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, California has established health-based ambient air quality standards for these and other pollutants, some of which are more stringent than the federal standards. Table 1 lists the current federal and State standards for regulated pollutants.



Table 1 Federal and Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	---	---
	24-Hour	---	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM10	Annual	---	20 µg/m <sup>3</sup>
	24-Hour	150 µg/m <sup>3</sup>	50 µg/m <sup>3</sup>
PM25	Annual	12 µg/m <sup>3</sup>	12 µg/m <sup>3</sup>
	24-Hour	35 µg/m <sup>3</sup>	---
Lead	30-Day Average	---	1.5 µg/m <sup>3</sup>
	3-Month Average	0.15 µg/m <sup>3</sup>	---

ppm = parts per million;

µg/m<sup>3</sup> = micrograms per cubic meter

Source: CARB 2016

The Bay Area Air Quality Management District (BAAQMD) is the designated air quality control agency in the SFBAAB. The SFBAAB is in nonattainment for the federal standards for ozone (O<sub>3</sub>) and PM<sub>2.5</sub> and in nonattainment for the state standard for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>. Characteristics of O<sub>3</sub> and suspended particulate matter are described below.

## OZONE

O<sub>3</sub> is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG). NO<sub>x</sub> is formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

## SUSPENDED PARTICLES

Atmospheric particulate matter is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The particulates that are of particular concern are PM<sub>10</sub> (which measures no more than 10 microns in diameter) and PM<sub>2.5</sub> (a fine particulate measuring no more than 2.5 microns in diameter). The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and PM<sub>2.5</sub> can be different. Major man-made sources of PM<sub>10</sub> are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer, PM<sub>2.5</sub>

particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. PM<sub>2.5</sub> is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body’s mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

## Current Ambient Air Quality

The BAAQMD operates a network of air quality monitoring stations throughout the SFBAAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The SFBAAB monitoring station closest to the project site is the San Jose-Knox Avenue station located approximately one mile south of the project site. Data from this station was used to determine PM<sub>2.5</sub> concentrations in the project vicinity. The San Jose-Jackson Street Station, which is located approximately two miles west of the project site, was used for O<sub>3</sub>, CO, and PM<sub>10</sub>. Table 2 indicates the number of days that each of the standards has been exceeded at these stations in each of the last three years for which data is available.

**Table 2 Ambient Air Quality at the Nearest Monitoring Stations**

Pollutant	2014	2015	2016
Ozone (ppm), Worst 1-Hour	0.089	0.094	0.087
Number of days of State exceedances (>0.09 ppm)	0	0	0
Ozone (ppm), 8-Hour Average	0.066	0.081	0.066
Number of days of State exceedances (>0.07 ppm)	0	2	0
Number of days of Federal exceedances (>0.07 ppm)	0	2	0
Carbon Monoxide (ppm), Highest 8-Hour Average	*	*	*
Number of days of above State or Federal standard (>9.0 ppm)	*	*	*
Particulate Matter <10 microns, µg/m <sup>3</sup> , Worst 24 Hours	56.4	58.8	40.0
Number of days above State standard (>50 µg/m <sup>3</sup> )	3	3	0
Number of days above Federal standard (>150 µg/m <sup>3</sup> )	0	0	0
Particulate Matter <2.5 microns, µg/m <sup>3</sup> , Worst 24 Hours <sup>1</sup>	24.3	46.9	26.5
Number of days above Federal standard (>35 µg/m <sup>3</sup> )	0	1	0

ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter

\* There was insufficient (or no) data available to determine the value.

<sup>1</sup>San Jose-Knox Avenue Station used for PM<sub>2.5</sub>, San Jose-Jackson Street Station used for all other pollutants.

Source: CARB 2017

## Air Quality Management Plan

The BAAQMD is responsible for assuring that the federal and State ambient air quality standards are attained and maintained in the Bay Area. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen

complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, conducting public education campaigns, as well as many other activities.

The BAAQMD adopted the 2017 Clean Air Plan (2017 Plan) on April 19, 2017 as an update to the 2010 Clean Air Plan. The 2017 Plan, which focuses on protecting public health and the climate, defines an integrated, multi-pollutant control strategy that includes all feasible measures to reduce emissions of ozone precursors (including transport of ozone and its precursors to neighboring air basins), PM, and toxic air contaminants (TACs). To protect public health, the control strategy will decrease population exposure to PM and TACs in communities that are most impacted by air pollution with the goal of eliminating disparities in exposure to air pollution between communities. The control strategy will protect the climate by reducing GHG emissions and developing a long-range vision of how the Bay Area could look and function in a year 2050 post-carbon economy (BAAQMD 2017b).

### **Sensitive Receptors**

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with an adequate margin of safety, to protect public health and welfare. They are designed to protect people most susceptible to respiratory distress, such as children under 14; persons over 65; persons engaged in strenuous work or exercise; and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore residences, schools, and hospitals. The sensitive receptors nearest to the project site are the adjacent residences west and south of the project site. The project would also place new sensitive receptors on the project site: students at the proposed school and residents of the proposed multi-family building.

## 3 Impact Analysis

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### 3.1 Methodology and Significance Thresholds

This air quality analysis conforms to the methodologies recommended in the BAAQMD's May 2017 *CEQA Air Quality Guidelines* to evaluate air quality. The May 2017 *CEQA Air Quality Guidelines* include revisions made to the 2010 Guidelines, addressing the California Supreme Court's 2015 opinion in the *Cal. Bldg. Indus. Ass'n vs. Bay Area Air Quality Mgmt. Dist.*, 62 Cal. 4th 369 (BAAQMD 2017a).

#### Significance Thresholds

To determine whether a project would have a significant impact to air quality, Appendix G of the *State CEQA Guidelines* asks whether a project would:

1. Conflict with or obstruct implementation of the applicable air quality plan
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)
4. Expose sensitive receptors to substantial pollutant concentrations
5. Create objectionable odors affecting a substantial number of people

#### *Emissions Thresholds*

The BAAQMD has developed screening criteria to provide lead agencies and project applicants with a conservative indication of whether a project could result in potentially significant air quality impacts. If all of the screening criteria are met by a project, then the lead agency or applicant would not need to perform a detailed air quality assessment of their project's air pollutant emissions. These screening levels are generally representative of new development on greenfield sites without any form of mitigation measures taken into consideration. For projects that are infill, such as the proposed project, emissions would be less than the greenfield-type project on which the screening criteria are based (BAAQMD 2017b). For mid-rise apartments, the BAAQMD's operational criteria pollutant screening size is 494 dwelling units and the construction-related screening size is 240 units. For an Elementary School, which has the smallest school screening threshold and thus most conservative, the operational criteria pollutant screening size is 44,000 square feet. The proposed project involves 94 residential units and 39,000 square feet of educational facilities and is therefore below the screening criteria. Therefore, pursuant to BAAQMD's screening thresholds for a potentially significant impact under CEQA, the project's air quality impacts would be less than significant. Nonetheless, this analysis quantifies emissions associated with the project and compares them to BAAQMD's numeric significance thresholds.

The BAAQMD *CEQA Air Quality Guidelines* quantify project-level air quality thresholds with defined numeric values and evaluation criteria for pollutant emissions. These project-level thresholds, shown in Table 3, represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 3.

**Table 3 Air Quality Thresholds of Significance**

Pollutant/Precursor	Construction-Related Thresholds	Operational Related Thresholds	
	Average Daily Emissions (pounds per day)	Maximum Annual Emissions (tpy)	Average Daily Emissions (lbs/da)
ROG	54	10	54
NO <sub>x</sub>	54	10	54
PM <sub>10</sub>	82 (exhaust)	15	82
PM <sub>2.5</sub>	54 (exhaust)	10	54

Source: Table 2-1, Bay Area Air Quality Management District, *CEQA Air Quality Guidelines*, May 2017.

Notes: tpy = tons per year; lbs/day = pounds per day; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; PM<sub>10</sub> = respirable particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; ROG = reactive organic gases; tpy = tons per year.

In addition, a significant air quality impact would occur if the project design or project construction does not incorporate control measures recommended by the BAAQMD to control emissions during construction (as listed in Table 8-1 of the BAAQMD *CEQA Air Quality Guidelines*).

#### *Localized Carbon Monoxide Concentrations*

A project's indirect CO emissions would be significant if they contribute to a violation of the State standards for CO (9.0 ppm averaged over 8 hours and 20 ppm over 1 hour).

#### *Toxic Air Contaminate Emissions*

Toxic air contaminants (TACs), including PM<sub>2.5</sub>, can have significant health impacts on local communities. The BAAQMD's *CEQA Air Quality Guidelines* sets thresholds applicable to projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TACs or PM<sub>2.5</sub> emissions. If impacts due to emissions of TACs or PM<sub>2.5</sub> from any individual source would exceed any of the thresholds listed below, the project would result in a significant impact:

- Non-compliance with a Community Risk Reduction Plan
- An excess cancer risk level of more than 10 in one million (10E-06), or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 from any individual source would be a significant cumulatively considerable contribution
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m<sup>3</sup>) annual average PM<sub>2.5</sub> from any individual source would be a significant cumulatively considerable contribution

## **Methodology for Estimating Emissions**

The significance thresholds described in the previous subsection represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively

considerable contribution to the SFBAAB's existing air quality conditions. The California Emissions Estimator Model (CalEEMod) version 2016.3.2 was used to calculate total project emissions, which include construction and operational emissions.

### *Short-Term Emissions*

Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. Demolition of the existing 7,099 square feet of vacant buildings onsite and construction of the proposed project would generate temporary emissions. Temporary emissions would result from three primary sources: operation of construction vehicles (e.g., scrapers, loaders, and excavators); ground disturbance during clearing and grading, which creates fugitive dust; and the application of asphalt, paint, or other oil-based substances. The extent of daily emissions, particularly ROG and NO<sub>x</sub> emissions, generated by construction equipment depend on the quantity of equipment used and the hours of operation for each project. The extent of fugitive dust (PM<sub>2.5</sub> and PM<sub>10</sub>) emissions would depend upon the following factors: 1) the amount of disturbed soils; 2) the length of disturbance time; 3) whether existing structures are demolished; 4) whether excavation is involved; and 5) whether transporting excavated materials offsite is necessary. The amount of ROG emissions generated by paints and oil-based substances, such as asphalt, depends upon the type and amount of material utilized.

CalEEMod was used to estimate air pollutant emissions associated with project construction, which was assumed to begin in December 2018 with operation in 2020 based on default construction phase timeframes incorporated into the model, except for the project grading phase which would occur over two months per applicant supplied information (see Appendix A). Construction would include demolition, site preparation, grading, construction, paving, and architectural coating. Grading would require approximately 6,000 cubic yards of soil to be exported based on applicant provided information. Architectural coating was assumed to begin halfway through building construction, consistent with typical construction schedules. Construction activities would result in temporary air quality impacts that may vary substantially from day to day, depending on the level of activity, the specific type of operation, and, for dust, the prevailing weather conditions.

In addition, it was assumed the project would comply with all applicable regulatory standards, including BAAQMD rules and regulations regarding construction emission control measures. These include using equipment with Best Available Control Technology (BACT) and using low volatile organic compound (VOC) architectural coatings. Although required, CalEEMod was run without using equipment with BACT and used default VOC architectural coatings. However, watering was assumed to occur twice daily in CalEEMod, which is recommended by the BAAQMD as a basic construction mitigation measure for all projects. Therefore, the modeling results provide a conservative estimate of emissions.

### *Long-Term Emissions*

CalEEMod was also used to estimate operational emissions, which included emissions from area sources, energy use, and mobile sources. Area source emissions, which would be generated by landscape maintenance equipment, consumer products, and architectural coating, were estimated using CalEEMod defaults. Mobile source emissions would be generated by the increase in motor vehicle trips to and from the project site as compared to existing conditions. This analysis used daily project traffic generation rates from the Traffic Impact Analysis prepared by Hexagon Transportation Consultants, Inc. (Hexagon).

### *Localized Carbon Monoxide Concentrations*

BAAQMD provides a preliminary screening methodology to conservatively determine whether a proposed project would exceed CO thresholds. If the following criteria are met, a project would result in a less than significant impact related to local CO concentrations:

1. Project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

### *Toxic Air Contaminant Emissions*

Local community risk and hazard impacts are associated with TACs and PM<sub>2.5</sub> because emissions of these pollutants can have significant health impacts at the local level. BAAQMD's *CEQA Air Quality Guidelines* include risk and hazard thresholds that are intended to apply to projects that would site new permitted or non-permitted sources in proximity to receptors and for projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TACs or PM<sub>2.5</sub> emissions. According to BAAQMD, residential land uses and schools are considered sensitive land uses. The main source of TACs for the project site is Alum Rock Avenue (State Route 130) located adjacent to the project site. Other nearby stationary sources are discussed below and listed in Table 8.

## 3.2 Project Impacts

### **Construction Emissions**

Project construction would generate temporary air pollutant emissions. Table 4 summarizes the estimated maximum daily emissions of pollutants during project construction. Maximum daily emissions account for compliance with BAAQMD watering requirements, but do not include any additional mitigation. As shown in Table 4, project emissions for all criteria pollutants would not exceed BAAQMD thresholds. Therefore, the average daily emissions would not exceed the BAAQMD project-level construction thresholds.

**Table 4 Project Construction Emissions**

Year	Estimated Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub> (exhaust)	PM <sub>2.5</sub> (exhaust)	SO <sub>x</sub>
2018 Maximum Daily Emissions	2.6	24.9	15.7	1.4	1.3	<0.1
2019 Maximum Daily Emissions	16.7	21.5	18.9	1.1	1.0	<0.1
2020 Maximum Daily Emissions	13.9	1.7	2.3	0.1	0.1	<0.1
BAAQMD Thresholds (average daily emissions)	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

See Table 2.0 "Overall Construction-mitigated" emissions. Winter emissions results are shown for all emissions except CO, which has higher summer emissions. See CalEEMod worksheets in Appendix A.

N/A = not applicable; no BAAQMD threshold for CO or SO<sub>x</sub>

## Operational Emissions

Long-term emissions associated with project operation, as shown in Table 5 and Table 6, would include emissions from vehicle trips (mobile sources), natural gas and electricity use (energy sources), and landscape maintenance equipment, consumer products and architectural coating associated with on-site development (area sources). As shown in Table 5 and Table 6, emissions would not exceed BAAQMD daily or annual thresholds for any criteria pollutant.



Table 5 Project Operational Average Daily Emissions

Sources	Average Daily Emissions (lbs/day)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Area	2.7	0.1	7.8	<0.1	<0.1	<0.1
Energy	<0.1	0.2	0.1	<0.1	<0.1	<0.1
Mobile	0.8	3.3	9.5	2.6	0.7	<0.1
Total Project Emissions	3.5	3.6	17.4	2.6	0.8	<0.1
BAAQMD Thresholds	54	54	N/A	82	54	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

See Table 2.0 "Overall operational-mitigated" Winter emissions. See CalEEMod worksheets in Appendix A. Numbers may not add up due to rounding.

N/A = not applicable; no BAAQMD threshold for CO or SO<sub>x</sub>

Table 6 Project Operational Maximum Annual Emissions

Sources	Maximum Annual Emissions (tons/year)					
	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>x</sub>
Area	0.5	<0.1	0.7	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	0.1	0.6	1.7	0.5	0.1	<0.1
Total Project Emissions	0.6	0.6	2.4	0.5	0.1	<0.1
BAAQMD Thresholds	10	10	N/A	15	10	N/A
Threshold Exceeded?	No	No	N/A	No	No	N/A

See Table 2.0 "Overall operational-mitigated" Winter emissions. See CalEEMod worksheets in Appendix A. Numbers may not add up due to rounding.

N/A = not applicable; no BAAQMD threshold for CO or SO<sub>x</sub>

## Toxic Air Contaminants

CARB has identified diesel particulate matter (DPM) as the primary airborne carcinogen in the state (CARB 2014). A primary source of DPM is exhaust from vehicle traffic on highways. In addition, the BAAQMD recommends analyzing permitted stationary sources. In order to assess potential exposure to TACs for new residents near highways and stationary sources, the BAAQMD recommends a risk and hazard screening analysis using BAAQMD's screening tools if the project would subject residents to substantial sources of TACs.

The project does not include construction of new highways or high-volume roadways which could be considered new permitted or non-permitted source of TACs or PM<sub>2.5</sub> in proximity to receptors. In addition, the project does not include construction of new stationary sources which could be considered a new permitted or non-permitted source of TACs or PM<sub>2.5</sub> in proximity to receptors.

The following analysis describes existing conditions compared to BAAQMD thresholds for exposure to TACs and PM<sub>2.5</sub>. Results of the screening analyses compare each existing source's estimated

cancer risk, PM<sub>2.5</sub>, and hazard values to applicable BAAQMD thresholds. As discussed above, the BAAQMD has established health risk thresholds; a potential health risk would occur if there is an excess cancer risk level of more than 10 in one million, an increased non-cancer (chronic or acute) hazard risk greater than 1.0, or if sensitive receptors would be exposed to an incremental increase of greater than 0.3 µg/m<sup>3</sup> annual average PM<sub>2.5</sub>. In addition, a cumulative health risk would occur if there is an excess cancer risk level of more than 100 in one million, an increase in non-cancer hazard risk greater than 10, or if sensitive receptors would be exposed to 0.8 µg/m<sup>3</sup>. Potential exposure of the proposed project to highway and stationary sources are discussed below.

### Highways

The project site is located along Alum Rock Avenue (State Route 130). DPM is the major TACs of concern for highway and roadway sources. The project would include residential development and a charter school. The charter school would be located parallel to the street, and sensitive receptors (students) would be located approximately 50 feet from the centerline of Alum Rock Avenue at their closest point. Proposed residences would be located southeast of the school and the nearest residential sensitive receptors would be located approximately 210 feet southeast of Alum Rock Avenue.

According to the TIA for the project, Alum Rock Avenue currently has 12,800 daily trips and under existing plus project conditions would have 15,570 daily trips that pass by the project site. The Highway Screening Analysis Tool (BAAQMD 2012a) was used to evaluate cancer risk and PM<sub>2.5</sub> concentration due to vehicle emissions from Alum Rock Avenue, north of the project site. The tool has data for associated health risks at both six and 20 foot elevations, depending on whether the sensitive receptors would be located near the ground floor (six feet) or several stories up (20 feet). As the school is proposed on the first floor and residences are proposed on the second floor, both six foot and 20 feet data was evaluated. The results are shown in Table 7.

**Table 7 Screening Data: Cancer Risk and Particulate Matter Concentrations**

Highways and Roadways	Receptor	Distance to Project Site (feet)	Cancer Risk (in 1 million)	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )	Increased Non-Cancer Risk (Chronic Hazard Index)	Increased Non-Cancer Risk (Acute Hazard Index)
State Route 130 – Alum Rock Avenue	Charter School <sup>1</sup>	50	10.82	0.13	0.01	0.03
	Residences <sup>2</sup>	210*	5.06	0.06	0.006	0.009
BAAQMD Individual Source Screening Threshold			10	0.3	1	1
Individual Source Threshold Exceeded?			Yes	No	No	No

\*Distance of 200 feet used as a conservative estimate. Data in the screening tool provides distances of 50 and 200 feet.

<sup>1</sup>Data from six foot elevation

<sup>2</sup>Data from 20 feet elevation

As shown in Table 7, TAC emissions and associated cancer risk, non-cancer risk, and PM<sub>2.5</sub> concentrations from Alum Rock Avenue would not exceed BAAQMD individual thresholds for proposed residences on the project site. However, while TAC emissions from Alum Rock Avenue would not expose the charter school to non-cancer risk and PM<sub>2.5</sub> concentrations in excess of BAAQMD thresholds, the charter school would be exposed to a cancer risk greater than 10 in one million. (It should be noted that the risk and hazard impacts in the BAAQMD’s screening tools do not necessarily represent actual CEQA environmental impacts. The values are based on reasonable

worst case assumptions to determine whether or not a refined modeling analysis is required. Calculations used in the screening analysis do not include source-specific exhaust information such as release height, exhaust gas exit velocity, exhaust gas temperature, nor do they account for specific distances from receptors. A more refined analysis using source-specific exhaust parameters, site-specific meteorological data, site-specific building dimensions and locations, and actual location of source and receptors would be expected to result in lower and more accurate values than the conservative values from the screening tools.) Measures to reduce cancer risk for the charter school are discussed in Section 3.3, *Recommendations to Reduce Air Quality Impacts*.

### Stationary Sources

In order to analyze existing stationary sources, the BAAQMD's Stationary Source Screening Analysis Tool (BAAQMD 2012b) was used to assess associated health risks at the proposed project. Per BAAQMD methodology, a 1,000 foot radius was drawn around the project site, and stationary sources within the perimeter were taken into account. A list of all stationary sources within 1,000 feet of the site is shown in Table 8.

Table 8 Stationary Sources within 1,000 Feet

BAAQMD Source ID Number	Type	Distance to Project Site (feet)	Cancer Risk (in 1 million)	PM <sub>2.5</sub> Concentration (µg/m <sup>3</sup> )	Increased Non-Cancer Risk (Chronic Hazard Index) <sup>1</sup>
19418	Generator	340	0.097	0.0001	N/A
G7394	Gasoline Dispensing Facility	965	0.15	N/A	0.0003
<b>Combined Total</b>			<b>0.247</b>	<b>0.0001</b>	<b>0.0003</b>
BAAQMD Individual Source Screening Threshold			10	0.3	1
Individual Threshold Exceeded?			No	No	No
BAAQMD Cumulative Screening Threshold			100	0.8	10
Cumulative Threshold Exceeded?			No	No	No

Sources: BAAQMD 2012b

Notes: PM<sub>2.5</sub> data not available for Source ID G7394

<sup>1</sup> The BAAQMD Stationary Source Screening Analysis Tool does not estimate acute hazards since the levels were found to be extremely low.

<sup>2</sup> BAAQMD's Distance Adjustment Multiplier Tool for Diesel Internal Combustion Engines does not include an adjustment for increased non-cancer risk.

As shown in Table 8 associated cancer risk, non-cancer risk, and PM<sub>2.5</sub> concentrations would not exceed BAAQMD individual or cumulative thresholds for all stationary sources. The nearest source identified in the Stationary Source Screening Analysis tool (ID: 19418) is approximately 340 feet (100 meters) southeast of the project site. Taking into account BAAQMD's Distance Adjustment Multiplier Tool for Diesel Internal Combustion (IC) Engines, the permitted source would result in cancer risk of 0.097 in one million, and PM<sub>2.5</sub> concentration of 0.0001 µg/m<sup>3</sup> at the project site (see Appendix B). To estimate the health risk from the gasoline dispensing facility (GDF) BAAQMD's Adjustment Multiplier Tool for GDFs was used to estimate cancer risk at 290 meters (951 feet). At 290 meters the GDF would result in cancer risk of 0.15 in one million and an increased non-cancer risk of 0.0003.

## Carbon Monoxide Hotspots

Analysis of the proposed project's traffic impacts indicates that the proposed project meets all three BAAQMD criteria for CO concentrations. According to the TIA prepared by Hexagon, no intersections affected by the project would handle more than 44,000 vehicles per hour; therefore, no intersection-specific CO modeling is required. The project is consistent with the County Congestion Management Program and would only affect intersections with traffic flows that peak at 1,000 to 2,000 vehicles per hour. As a result, the project would not result in individually or cumulatively significant impacts from CO emissions and would have a less than significant impact on local CO concentrations.

## Odors

During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. Construction-related odors would disperse and dissipate and would not cause substantial odors at the closest sensitive receptors (adjacent residences). In addition, construction-related odors would be short-term and would cease upon completion of construction.

The proposed project would involve multi-family residential units and a school. The project would not include any uses that generate substantial objectionable odors as listed on Table 3-3 in the BAAQMD *CEQA Air Quality Guidelines* or site a new odor source or receptor (BAAQMD 2017a).

## Air Quality Plan Consistency

To be consistent with an air quality management plan (AQMP), a project must conform to the local General Plan and must not result in or contribute to an exceedance of the local jurisdiction's forecasted future population. A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. Population growth would lead to increased vehicle use, energy consumption, and associated air pollutant emissions. The most recent and applicable adopted air quality plan is the 2017 Plan. Therefore, the proposed project would result in a significant impact if it would conflict with or obstruct implementation of the 2017 Plan (BAAQMD 2017c).

The proposed project would increase the population in San Jose by adding an estimated 302 residents (94 units x 3.21 persons per household) (DOF 2017). BAAQMD uses the Association of Bay Area Government's (ABAG) growth forecast. The California Department of Finance estimates that the current population of San Jose (2017) is 1,046,079 with 332,574 housing units (DOF 2017). The addition of 94 units and 302 new residents would bring the total population to about 1,046,381 people and the total number of housing units to 332,668. The latest ABAG projections do not include a population forecast but include a housing forecast. ABAG estimates that the number of housing units in the city in 2040 will be 448,300 (ABAG 2017). The population and housing growth associated with the project is well within ABAG projections and therefore also within the BAAQMD 2017 Plan projections. Therefore, the project would not conflict with or obstruct the implementation of an applicable air quality plan.

## 3.3 Recommendations to Reduce Air Quality Impacts

As described in Section 3.2, the individual cancer risk is above BAAQMD thresholds at the charter school as a result of DPM emissions, the major TACs of concern for highway and roadway sources,

from Alum Rock Avenue. To reduce this impact to below threshold levels, Recommendation AQ-1 Particulate Infiltration Reductions and/or Recommendation AQ-2 Location-specific Health Risk Assessment should be implemented for the project.

### **Recommendation AQ-1: Particulate Infiltration Reductions**

The applicant shall implement the following to reduce exposure of students in the proposed charter school to DPM emissions from vehicles on Alum Rock Avenue:

1. Submit to the City of San Jose a ventilation proposal prepared by a licensed design professional for the charter school that describes the ventilation design and how that design ensures all charter school interior spaces will be below the excess cancer risk level of 10 in on million established by the Bay Area Air Quality Management District.
2. If the charter school would use operable windows or other sources of infiltration of ambient air, the development shall install a central heating, ventilation, and air conditioning (HVAC) system that includes high efficiency particulate filters.
3. If the development limits infiltration through non-operable windows, a suitable ventilation system shall include filtration specifications equivalent to or better than the following: (1) American Society of Heating, Refrigerating and Air- Conditioning Engineers MERV-13 supply air filters, (2) greater than or equal to one air exchanges per hour of fresh outside filtered air, (3) greater than or equal to four air exchanges per hour recirculation, and (4) less than or equal to 0.25 air exchanges per hour in unfiltered infiltration. These types of filtration methods are capable of removing approximately 90 percent of the DPM emissions from air introduced into the HVAC system.
4. Windows and doors shall be fully weatherproofed with caulking and weather-stripping that is rated to last at least 20 years. Weatherproof shall be maintained and replaced by the property owner, as necessary, to ensure functionality for the lifetime of the project.
5. Where appropriate, install passive (drop-in) electrostatic filtering systems, especially those with low air velocities (*i.e.*, 1 mph)
6. Ensure an ongoing maintenance plan for the HVAC and filtration systems. Manufacturers of these types of filters recommend that they be replaced after two to three months of use.
7. The applicant shall inform occupants regarding the proper use of any installed air filtration system.

### **Recommendation AQ-2: Location-specific Health Risk Assessment**

A location-specific health risk assessment (HRA) shall be prepared in accordance with the most recent Bay Area Air Quality Management District guidelines for modeling local risks and hazards. If the HRA indicates that the project would expose sensitive receptors to an unacceptable health risk resulting from the project's proximity to Alum Rock Avenue, then additional mitigation (such as that described in Recommendation AQ-1) that reduces health risk below standards recommended by the Bay Area Air Quality Management District shall be incorporated into the development prior to permit issuance.

## **3.4 Conclusions**

As discussed under Section 3.2, *Project Impacts*, impacts related to construction emissions, operational emissions, carbon monoxide hotspots, odors, and air quality place consistency would be

less than significant. Impacts related to TACs would be reduced to a less than significant level with implementation of Recommendation AQ-1 and/or Recommendation AQ-2, as demonstrated below.

Implementation of Recommendation AQ-1 would provide for the removal of particulates prior to entering into the indoor environment, thereby reducing the overall exposure of students. Health risk concentrations with measures in place are shown in Table 9 and calculations are included in Appendix C. The MERV-13 filter system would reduce the carcinogenic health risk associated with vehicle traffic along Alum Rock Avenue from 10.8 in one million to 0.8 in one million, which is below BAAQMD thresholds (see Appendix B for calculations). In addition, although PM<sub>2.5</sub> concentrations were below individual thresholds prior to the measures aimed for reducing cancer risk, PM<sub>2.5</sub> levels would be further reduced to 0.01 (µg/m<sup>3</sup>) from vehicle traffic on Alum Rock Avenue. Although cancer risk and PM<sub>2.5</sub> concentrations were below cumulative thresholds prior to the measures aimed for reducing cancer risk, cumulative cancer risk would be further reduced to approximately 1.047 in one million and cumulative PM<sub>2.5</sub> concentrations would be further reduced to approximately 0.0101 µg/m<sup>3</sup>.

Calculations shown in Table 9 are based on the assumption of a seven hour school day; that children are exposed to outdoor air (100 percent of the particulates) at school for approximately 1.2 hours per day; that they are exposed to indoor air at school approximately 5.8 hours per day; and the remaining time of day is spent off-site (EPA Exposure Factors Handbook 2011). The indoor air is assumed to be filtered with an efficiency of 90 percent, as defined in the required actions above. The recommended MERV-13 filters have a Dust Spot Efficiency rating of 89 to 90 percent and an arrestance rate of over 98 percent (Mechanical Repts, Inc. 2013). This modeling methodology for air filtration systems is approved by the BAAQMD in its CEQA guidelines. As shown in Table 9, the recommendations outlined in AQ-1 would reduce health risk to below BAAQMD thresholds and would therefore ensure the project does not expose sensitive receptors to substantial pollutant concentrations.

**Table 9 Health Risks after Recommendation AQ-1**

	<b>Cancer Risk (in 1 million)</b>	<b>PM<sub>2.5</sub> Concentration (µg/m<sup>3</sup>)</b>
Alum Rock Avenue (Highway Source)	0.8	0.01
BAAQMD Individual Source Screening Threshold	10	0.3
Individual Source Threshold Exceeded?	No	No
<b>Combined Total of All Sources<sup>1</sup></b>	<b>1.047</b>	<b>0.0101</b>
BAAQMD Cumulative Screening Threshold	100	0.8
Cumulative Threshold Exceeded?	No	No

See Appendix B for calculations.

<sup>1</sup>See Table 8 for Stationary Source totals. Risk would be even lower because the recommendations would decrease risk from the generator source, which also emits DPM. However, the cancer risk from the generator is so low that the reduction has not been included.

Preparation of a HRA under Recommendation AQ-2 would involve refined modeling specific to the project. Because BAAQMD's screening tools represent a reasonable worst case assumption it is possible that the results of a site specific HRA would not exceed the applicable thresholds. However, if the HRA determines that the project would expose sensitive receptors to an unacceptable health risk resulting from the project's proximity to Alum Rock Avenue then additional mitigation to reduce health risk, similar to Recommendation AQ-1, would be implemented for the project.

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## 4 References

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# Appendix A

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California Emissions Estimator Model (CalEEMod) Results

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**Silver Creek Mixed-Use Project**  
**Santa Clara County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior High School	3.90	1000sqft	0.49	3,900.00	0
Enclosed Parking with Elevator	50.00	Space	0.00	20,000.00	0
Other Asphalt Surfaces	9.77	1000sqft	0.22	9,768.00	0
Parking Lot	9.00	Space	0.00	3,600.00	0
Apartments Mid Rise	94.00	Dwelling Unit	0.78	94,000.00	269

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Silver Creek Mixed-Use Project - Santa Clara County, Winter

Project Characteristics -

Land Use - Apts built on top of parking, so no parking acreage

Construction Phase - Arch coating extended to overlap with building cons. for more realistic scenario. Applicant provided schedule.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - 7099 sf per applicant provided info

Grading - 6,000 CY per applicant provided information

Vehicle Trips - Per project traffic study: 2.83 for school and 5.44 for apts

Woodstoves - No fire place per site plans

Energy Use - Apt reduced by 28% to meet current Title 24 standards

Construction Off-road Equipment Mitigation - Per BAAQMD Basic Construction Measure

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	Area_EF_Parking	150	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	PhaseEndDate	5/8/2020	1/3/2020
tblConstructionPhase	PhaseStartDate	12/21/2019	8/19/2019
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	NT24E	3,277.06	2,359.48
tblEnergyUse	NT24NG	3,155.00	2,271.60
tblEnergyUse	T24E	392.47	282.58

## Silver Creek Mixed-Use Project - Santa Clara County, Winter

tblEnergyUse	T24NG	7,914.07	5,698.13
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	14.10	0.00
tblFireplaces	NumberNoFireplace	3.76	0.00
tblFireplaces	NumberWood	15.98	0.00
tblGrading	AcresOfGrading	16.13	1.50
tblGrading	MaterialExported	0.00	6,000.00
tblLandUse	BuildingSpaceSquareFeet	9,770.00	9,768.00
tblLandUse	LandUseSquareFeet	9,770.00	9,768.00
tblLandUse	LotAcreage	0.09	0.49
tblLandUse	LotAcreage	0.45	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	2.47	0.78
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	13.78	2.83
tblWoodstoves	NumberCatalytic	1.88	0.00
tblWoodstoves	NumberNoncatalytic	1.88	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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Silver Creek Mixed-Use Project - Santa Clara County, Winter

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5576	24.9348	15.6372	0.0264	5.8653	1.4393	6.8180	2.9711	1.3456	3.8476	0.0000	2,629.5402	2,629.5402	0.6156	0.0000	2,644.9295
2019	16.6641	21.5122	18.7588	0.0370	5.8653	1.0645	6.7481	2.9711	1.0322	3.7833	0.0000	3,520.9815	3,520.9815	0.5411	0.0000	3,532.4014
2020	13.9458	1.7282	2.2647	4.2300e-003	0.1397	0.1118	0.2515	0.0370	0.1117	0.1488	0.0000	407.3273	407.3273	0.0249	0.0000	407.9501
<b>Maximum</b>	<b>16.6641</b>	<b>24.9348</b>	<b>18.7588</b>	<b>0.0370</b>	<b>5.8653</b>	<b>1.4393</b>	<b>6.8180</b>	<b>2.9711</b>	<b>1.3456</b>	<b>3.8476</b>	<b>0.0000</b>	<b>3,520.9815</b>	<b>3,520.9815</b>	<b>0.6156</b>	<b>0.0000</b>	<b>3,532.4014</b>

**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					
2018	2.5576	24.9348	15.6372	0.0264	2.6755	1.4393	3.6282	1.3466	1.3456	2.2231	0.0000	2,629.5402	2,629.5402	0.6156	0.0000	2,644.9295
2019	16.6641	21.5122	18.7588	0.0370	2.6755	1.0645	3.5583	1.3466	1.0322	2.1588	0.0000	3,520.9815	3,520.9815	0.5411	0.0000	3,532.4014
2020	13.9458	1.7282	2.2647	4.2300e-003	0.1397	0.1118	0.2515	0.0370	0.1117	0.1488	0.0000	407.3273	407.3273	0.0249	0.0000	407.9501
<b>Maximum</b>	<b>16.6641</b>	<b>24.9348</b>	<b>18.7588</b>	<b>0.0370</b>	<b>2.6755</b>	<b>1.4393</b>	<b>3.6282</b>	<b>1.3466</b>	<b>1.3456</b>	<b>2.2231</b>	<b>0.0000</b>	<b>3,520.9815</b>	<b>3,520.9815</b>	<b>0.6156</b>	<b>0.0000</b>	<b>3,532.4014</b>





Silver Creek Mixed-Use Project - Santa Clara County, Winter

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Energy	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
Mobile	0.7792	3.3207	9.5193	0.0281	2.5508	0.0286	2.5794	0.6809	0.0268	0.7078		2,826.2907	2,826.2907	0.1062		2,828.9467
<b>Total</b>	<b>3.5217</b>	<b>3.6194</b>	<b>17.4045</b>	<b>0.0298</b>	<b>2.5508</b>	<b>0.0882</b>	<b>2.6390</b>	<b>0.6809</b>	<b>0.0864</b>	<b>0.7673</b>	<b>0.0000</b>	<b>3,105.0317</b>	<b>3,105.0317</b>	<b>0.1250</b>	<b>4.8500e-003</b>	<b>3,109.6026</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Energy	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
Mobile	0.7792	3.3207	9.5193	0.0281	2.5508	0.0286	2.5794	0.6809	0.0268	0.7078		2,826.2907	2,826.2907	0.1062		2,828.9467
<b>Total</b>	<b>3.5217</b>	<b>3.6194</b>	<b>17.4045</b>	<b>0.0298</b>	<b>2.5508</b>	<b>0.0882</b>	<b>2.6390</b>	<b>0.6809</b>	<b>0.0864</b>	<b>0.7673</b>	<b>0.0000</b>	<b>3,105.0317</b>	<b>3,105.0317</b>	<b>0.1250</b>	<b>4.8500e-003</b>	<b>3,109.6026</b>

## Silver Creek Mixed-Use Project - Santa Clara County, Winter

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/3/2018	12/28/2018	5	20	
2	Site Preparation	Site Preparation	12/29/2018	1/1/2019	5	2	
3	Grading	Grading	1/2/2019	3/1/2019	5	43	
4	Building Construction	Building Construction	3/2/2019	12/6/2019	5	200	
5	Paving	Paving	12/7/2019	12/20/2019	5	10	
6	Architectural Coating	Architectural Coating	8/19/2019	1/3/2020	5	100	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.22**

**Residential Indoor: 190,350; Residential Outdoor: 63,450; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 2,002 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Silver Creek Mixed-Use Project - Santa Clara County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Silver Creek Mixed-Use Project - Santa Clara County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	83.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Demolition - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3494	0.0000	0.3494	0.0529	0.0000	0.0529			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
<b>Total</b>	<b>2.4838</b>	<b>24.3641</b>	<b>15.1107</b>	<b>0.0241</b>	<b>0.3494</b>	<b>1.4365</b>	<b>1.7859</b>	<b>0.0529</b>	<b>1.3429</b>	<b>1.3958</b>		<b>2,391.1659</b>	<b>2,391.1659</b>	<b>0.6058</b>		<b>2,406.3105</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.2 Demolition - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0156	0.5268	0.1070	1.2800e-003	0.0280	2.1200e-003	0.0301	7.6600e-003	2.0300e-003	9.6900e-003		135.9631	135.9631	6.6700e-003		136.1298
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0439	0.4195	1.0300e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		102.4112	102.4112	3.1200e-003		102.4893
<b>Total</b>	<b>0.0738</b>	<b>0.5707</b>	<b>0.5264</b>	<b>2.3100e-003</b>	<b>0.1348</b>	<b>2.8100e-003</b>	<b>0.1376</b>	<b>0.0360</b>	<b>2.6700e-003</b>	<b>0.0387</b>		<b>238.3743</b>	<b>238.3743</b>	<b>9.7900e-003</b>		<b>238.6191</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1572	0.0000	0.1572	0.0238	0.0000	0.0238			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
<b>Total</b>	<b>2.4838</b>	<b>24.3641</b>	<b>15.1107</b>	<b>0.0241</b>	<b>0.1572</b>	<b>1.4365</b>	<b>1.5937</b>	<b>0.0238</b>	<b>1.3429</b>	<b>1.3667</b>	<b>0.0000</b>	<b>2,391.1659</b>	<b>2,391.1659</b>	<b>0.6058</b>		<b>2,406.3105</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.2 Demolition - 2018**

**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	0.0156	0.5268	0.1070	1.2800e-003	0.0280	2.1200e-003	0.0301	7.6600e-003	2.0300e-003	9.6900e-003		135.9631	135.9631	6.6700e-003		136.1298
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0439	0.4195	1.0300e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		102.4112	102.4112	3.1200e-003		102.4893
<b>Total</b>	<b>0.0738</b>	<b>0.5707</b>	<b>0.5264</b>	<b>2.3100e-003</b>	<b>0.1348</b>	<b>2.8100e-003</b>	<b>0.1376</b>	<b>0.0360</b>	<b>2.6700e-003</b>	<b>0.0387</b>		<b>238.3743</b>	<b>238.3743</b>	<b>9.7900e-003</b>		<b>238.6191</b>

**3.3 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.9523</b>	<b>6.7518</b>	<b>2.9537</b>	<b>0.8761</b>	<b>3.8298</b>		<b>1,735.3630</b>	<b>1,735.3630</b>	<b>0.5402</b>		<b>1,748.8690</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.3 Site Preparation - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0270	0.2582	6.3000e-004	0.0657	4.3000e-004	0.0662	0.0174	3.9000e-004	0.0178		63.0223	63.0223	1.9200e-003		63.0703
<b>Total</b>	<b>0.0358</b>	<b>0.0270</b>	<b>0.2582</b>	<b>6.3000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>63.0223</b>	<b>63.0223</b>	<b>1.9200e-003</b>		<b>63.0703</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.9523</b>	<b>3.5621</b>	<b>1.3292</b>	<b>0.8761</b>	<b>2.2052</b>	<b>0.0000</b>	<b>1,735.3630</b>	<b>1,735.3630</b>	<b>0.5402</b>		<b>1,748.8690</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.3 Site Preparation - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0358	0.0270	0.2582	6.3000e-004	0.0657	4.3000e-004	0.0662	0.0174	3.9000e-004	0.0178		63.0223	63.0223	1.9200e-003		63.0703
<b>Total</b>	<b>0.0358</b>	<b>0.0270</b>	<b>0.2582</b>	<b>6.3000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>63.0223</b>	<b>63.0223</b>	<b>1.9200e-003</b>		<b>63.0703</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118		1,704.9189	1,704.9189	0.5394		1,718.4044
<b>Total</b>	<b>1.7123</b>	<b>19.4821</b>	<b>7.8893</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8824</b>	<b>6.6819</b>	<b>2.9537</b>	<b>0.8118</b>	<b>3.7655</b>		<b>1,704.9189</b>	<b>1,704.9189</b>	<b>0.5394</b>		<b>1,718.4044</b>



Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0236	0.2281	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		61.1479	61.1479	1.6900e-003		61.1901
<b>Total</b>	<b>0.0323</b>	<b>0.0236</b>	<b>0.2281</b>	<b>6.1000e-004</b>	<b>0.0657</b>	<b>4.2000e-004</b>	<b>0.0661</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>61.1479</b>	<b>61.1479</b>	<b>1.6900e-003</b>		<b>61.1901</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044
<b>Total</b>	<b>1.7123</b>	<b>19.4821</b>	<b>7.8893</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.8824</b>	<b>3.4922</b>	<b>1.3292</b>	<b>0.8118</b>	<b>2.1409</b>	<b>0.0000</b>	<b>1,704.9189</b>	<b>1,704.9189</b>	<b>0.5394</b>		<b>1,718.4044</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0236	0.2281	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		61.1479	61.1479	1.6900e-003		61.1901
<b>Total</b>	<b>0.0323</b>	<b>0.0236</b>	<b>0.2281</b>	<b>6.1000e-004</b>	<b>0.0657</b>	<b>4.2000e-004</b>	<b>0.0661</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>61.1479</b>	<b>61.1479</b>	<b>1.6900e-003</b>		<b>61.1901</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5693	0.0000	4.5693	2.4891	0.0000	2.4891			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5693</b>	<b>0.7365</b>	<b>5.3058</b>	<b>2.4891</b>	<b>0.6775</b>	<b>3.1666</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	5.4529	1.1217	0.0138	0.3048	0.0211	0.3259	0.0835	0.0202	0.1037		1,467.3284	1,467.3284	0.0714		1,469.1122
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0236	0.2281	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		61.1479	61.1479	1.6900e-003		61.1901
<b>Total</b>	<b>0.1934</b>	<b>5.4765</b>	<b>1.3497</b>	<b>0.0144</b>	<b>0.3705</b>	<b>0.0215</b>	<b>0.3920</b>	<b>0.1010</b>	<b>0.0206</b>	<b>0.1215</b>		<b>1,528.4763</b>	<b>1,528.4763</b>	<b>0.0730</b>		<b>1,530.3023</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0562	0.0000	2.0562	1.1201	0.0000	1.1201			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0562</b>	<b>0.7365</b>	<b>2.7927</b>	<b>1.1201</b>	<b>0.6775</b>	<b>1.7976</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1611	5.4529	1.1217	0.0138	0.3048	0.0211	0.3259	0.0835	0.0202	0.1037		1,467.3284	1,467.3284	0.0714		1,469.1122
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0236	0.2281	6.1000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		61.1479	61.1479	1.6900e-003		61.1901
<b>Total</b>	<b>0.1934</b>	<b>5.4765</b>	<b>1.3497</b>	<b>0.0144</b>	<b>0.3705</b>	<b>0.0215</b>	<b>0.3920</b>	<b>0.1010</b>	<b>0.0206</b>	<b>0.1215</b>		<b>1,528.4763</b>	<b>1,528.4763</b>	<b>0.0730</b>		<b>1,530.3023</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.0203	0.5798	4.3300e-003	0.1083	0.0146	0.1230	0.0312	0.0140	0.0452		457.1626	457.1626	0.0240		457.7619
Worker	0.3354	0.2452	2.3661	6.3700e-003	0.6818	4.3500e-003	0.6862	0.1809	4.0000e-003	0.1849		634.4093	634.4093	0.0175		634.8472
<b>Total</b>	<b>0.4161</b>	<b>2.2655</b>	<b>2.9458</b>	<b>0.0107</b>	<b>0.7902</b>	<b>0.0190</b>	<b>0.8091</b>	<b>0.2120</b>	<b>0.0180</b>	<b>0.2301</b>		<b>1,091.5718</b>	<b>1,091.5718</b>	<b>0.0415</b>		<b>1,092.6091</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0807	2.0203	0.5798	4.3300e-003	0.1083	0.0146	0.1230	0.0312	0.0140	0.0452		457.1626	457.1626	0.0240		457.7619
Worker	0.3354	0.2452	2.3661	6.3700e-003	0.6818	4.3500e-003	0.6862	0.1809	4.0000e-003	0.1849		634.4093	634.4093	0.0175		634.8472
<b>Total</b>	<b>0.4161</b>	<b>2.2655</b>	<b>2.9458</b>	<b>0.0107</b>	<b>0.7902</b>	<b>0.0190</b>	<b>0.8091</b>	<b>0.2120</b>	<b>0.0180</b>	<b>0.2301</b>		<b>1,091.5718</b>	<b>1,091.5718</b>	<b>0.0415</b>		<b>1,092.6091</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815		1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9615</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>		<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0384	0.3706	1.0000e-003	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		99.3653	99.3653	2.7400e-003		99.4339
<b>Total</b>	<b>0.0525</b>	<b>0.0384</b>	<b>0.3706</b>	<b>1.0000e-003</b>	<b>0.1068</b>	<b>6.8000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>99.3653</b>	<b>99.3653</b>	<b>2.7400e-003</b>		<b>99.4339</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815	0.0000	1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9615</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>	<b>0.0000</b>	<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0384	0.3706	1.0000e-003	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		99.3653	99.3653	2.7400e-003		99.4339
<b>Total</b>	<b>0.0525</b>	<b>0.0384</b>	<b>0.3706</b>	<b>1.0000e-003</b>	<b>0.1068</b>	<b>6.8000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>99.3653</b>	<b>99.3653</b>	<b>2.7400e-003</b>		<b>99.4339</b>

**3.7 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>13.9073</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>



Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.7 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0502	0.4846	1.3000e-003	0.1397	8.9000e-004	0.1405	0.0370	8.2000e-004	0.0379		129.9393	129.9393	3.5900e-003		130.0289
<b>Total</b>	<b>0.0687</b>	<b>0.0502</b>	<b>0.4846</b>	<b>1.3000e-003</b>	<b>0.1397</b>	<b>8.9000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.2000e-004</b>	<b>0.0379</b>		<b>129.9393</b>	<b>129.9393</b>	<b>3.5900e-003</b>		<b>130.0289</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>13.9073</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.7 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0687	0.0502	0.4846	1.3000e-003	0.1397	8.9000e-004	0.1405	0.0370	8.2000e-004	0.0379		129.9393	129.9393	3.5900e-003		130.0289
<b>Total</b>	<b>0.0687</b>	<b>0.0502</b>	<b>0.4846</b>	<b>1.3000e-003</b>	<b>0.1397</b>	<b>8.9000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.2000e-004</b>	<b>0.0379</b>		<b>129.9393</b>	<b>129.9393</b>	<b>3.5900e-003</b>		<b>130.0289</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.8830</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0443	0.4332	1.2600e-003	0.1397	8.7000e-004	0.1405	0.0370	8.0000e-004	0.0378		125.8793	125.8793	3.1200e-003		125.9573
<b>Total</b>	<b>0.0629</b>	<b>0.0443</b>	<b>0.4332</b>	<b>1.2600e-003</b>	<b>0.1397</b>	<b>8.7000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.0000e-004</b>	<b>0.0378</b>		<b>125.8793</b>	<b>125.8793</b>	<b>3.1200e-003</b>		<b>125.9573</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.8830</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0443	0.4332	1.2600e-003	0.1397	8.7000e-004	0.1405	0.0370	8.0000e-004	0.0378		125.8793	125.8793	3.1200e-003		125.9573
<b>Total</b>	<b>0.0629</b>	<b>0.0443</b>	<b>0.4332</b>	<b>1.2600e-003</b>	<b>0.1397</b>	<b>8.7000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.0000e-004</b>	<b>0.0378</b>		<b>125.8793</b>	<b>125.8793</b>	<b>3.1200e-003</b>		<b>125.9573</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Silver Creek Mixed-Use Project - Santa Clara County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7792	3.3207	9.5193	0.0281	2.5508	0.0286	2.5794	0.6809	0.0268	0.7078		2,826.2907	2,826.2907	0.1062		2,828.9467
Unmitigated	0.7792	3.3207	9.5193	0.0281	2.5508	0.0286	2.5794	0.6809	0.0268	0.7078		2,826.2907	2,826.2907	0.1062		2,828.9467

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	511.36	511.36	511.36	1,181,041	1,181,041
Enclosed Parking with Elevator	0.00	0.00	0.00		
Junior High School	11.04	0.00	0.00	17,724	17,724
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>522.40</b>	<b>511.36</b>	<b>511.36</b>	<b>1,198,765</b>	<b>1,198,765</b>

4.3 Trip Type Information

Silver Creek Mixed-Use Project - Santa Clara County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior High School	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Other Asphalt Surfaces	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Apartments Mid Rise	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Silver Creek Mixed-Use Project - Santa Clara County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
NaturalGas Unmitigated	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345

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	2052.48	0.0221	0.1892	0.0805	1.2100e-003		0.0153	0.0153		0.0153	0.0153		241.4681	241.4681	4.6300e-003	4.4300e-003	242.9030
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	197.992	2.1400e-003	0.0194	0.0163	1.2000e-004		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		23.2932	23.2932	4.5000e-004	4.3000e-004	23.4316
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0243</b>	<b>0.2086</b>	<b>0.0968</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>264.7612</b>	<b>264.7612</b>	<b>5.0800e-003</b>	<b>4.8600e-003</b>	<b>266.3345</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.05248	0.0221	0.1892	0.0805	1.2100e-003		0.0153	0.0153		0.0153	0.0153		241.4681	241.4681	4.6300e-003	4.4300e-003	242.9030
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	0.197992	2.1400e-003	0.0194	0.0163	1.2000e-004		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		23.2932	23.2932	4.5000e-004	4.3000e-004	23.4316
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0243</b>	<b>0.2086</b>	<b>0.0968</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>264.7612</b>	<b>264.7612</b>	<b>5.0800e-003</b>	<b>4.8600e-003</b>	<b>266.3345</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



Silver Creek Mixed-Use Project - Santa Clara County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Unmitigated	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3737					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1069					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2376	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9798	13.9798	0.0137		14.3213
<b>Total</b>	<b>2.7182</b>	<b>0.0901</b>	<b>7.7884</b>	<b>4.1000e-004</b>		<b>0.0428</b>	<b>0.0428</b>		<b>0.0428</b>	<b>0.0428</b>	<b>0.0000</b>	<b>13.9798</b>	<b>13.9798</b>	<b>0.0137</b>	<b>0.0000</b>	<b>14.3213</b>

Silver Creek Mixed-Use Project - Santa Clara County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3737					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1069					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2376	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9798	13.9798	0.0137		14.3213
<b>Total</b>	<b>2.7182</b>	<b>0.0901</b>	<b>7.7884</b>	<b>4.1000e-004</b>		<b>0.0428</b>	<b>0.0428</b>		<b>0.0428</b>	<b>0.0428</b>	<b>0.0000</b>	<b>13.9798</b>	<b>13.9798</b>	<b>0.0137</b>	<b>0.0000</b>	<b>14.3213</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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Silver Creek Mixed-Use Project - Santa Clara County, 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**

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Silver Creek Mixed-Use Project - Santa Clara County, Summer

**Silver Creek Mixed-Use Project**  
**Santa Clara County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior High School	3.90	1000sqft	0.49	3,900.00	0
Enclosed Parking with Elevator	50.00	Space	0.00	20,000.00	0
Other Asphalt Surfaces	9.77	1000sqft	0.22	9,768.00	0
Parking Lot	9.00	Space	0.00	3,600.00	0
Apartments Mid Rise	94.00	Dwelling Unit	0.78	94,000.00	269

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MW hr)</b>	641.35	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

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

Silver Creek Mixed-Use Project - Santa Clara County, Summer

Project Characteristics -

Land Use - Apts built on top of parking, so no parking acreage

Construction Phase - Arch coating extended to overlap with building cons. for more realistic scenario. Applicant provided schedule.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - 7099 sf per applicant provided info

Grading - 6,000 CY per applicant provided information

Vehicle Trips - Per project traffic study: 2.83 for school and 5.44 for apts

Woodstoves - No fire place per site plans

Energy Use - Apt reduced by 28% to meet current Title 24 standards

Construction Off-road Equipment Mitigation - Per BAAQMD Basic Construction Measure

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	Area_EF_Parking	150	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	PhaseEndDate	5/8/2020	1/3/2020
tblConstructionPhase	PhaseStartDate	12/21/2019	8/19/2019
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	NT24E	3,277.06	2,359.48
tblEnergyUse	NT24NG	3,155.00	2,271.60
tblEnergyUse	T24E	392.47	282.58

## Silver Creek Mixed-Use Project - Santa Clara County, Summer

tblEnergyUse	T24NG	7,914.07	5,698.13
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	14.10	0.00
tblFireplaces	NumberNoFireplace	3.76	0.00
tblFireplaces	NumberWood	15.98	0.00
tblGrading	AcresOfGrading	16.13	1.50
tblGrading	MaterialExported	0.00	6,000.00
tblLandUse	BuildingSpaceSquareFeet	9,770.00	9,768.00
tblLandUse	LandUseSquareFeet	9,770.00	9,768.00
tblLandUse	LotAcreage	0.09	0.49
tblLandUse	LotAcreage	0.45	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	2.47	0.78
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	13.78	2.83
tblWoodstoves	NumberCatalytic	1.88	0.00
tblWoodstoves	NumberNoncatalytic	1.88	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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Silver Creek Mixed-Use Project - Santa Clara County, Summer

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2018	2.5537	24.9135	15.6565	0.0265	5.8653	1.4392	6.8180	2.9711	1.3455	3.8476	0.0000	2,640.8416	2,640.8416	0.6154	0.0000	2,656.2275
2019	16.6367	21.3738	18.8986	0.0378	5.8653	1.0643	6.7481	2.9711	1.0320	3.7833	0.0000	3,600.3080	3,600.3080	0.5412	0.0000	3,611.7203
2020	13.9421	1.7201	2.2990	4.3500e-003	0.1397	0.1118	0.2515	0.0370	0.1117	0.1488	0.0000	418.4691	418.4691	0.0251	0.0000	419.0977
<b>Maximum</b>	<b>16.6367</b>	<b>24.9135</b>	<b>18.8986</b>	<b>0.0378</b>	<b>5.8653</b>	<b>1.4392</b>	<b>6.8180</b>	<b>2.9711</b>	<b>1.3455</b>	<b>3.8476</b>	<b>0.0000</b>	<b>3,600.3080</b>	<b>3,600.3080</b>	<b>0.6154</b>	<b>0.0000</b>	<b>3,611.7203</b>

**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					
2018	2.5537	24.9135	15.6565	0.0265	2.6755	1.4392	3.6282	1.3466	1.3455	2.2231	0.0000	2,640.8416	2,640.8416	0.6154	0.0000	2,656.2275
2019	16.6367	21.3738	18.8986	0.0378	2.6755	1.0643	3.5583	1.3466	1.0320	2.1588	0.0000	3,600.3080	3,600.3080	0.5412	0.0000	3,611.7203
2020	13.9421	1.7201	2.2990	4.3500e-003	0.1397	0.1118	0.2515	0.0370	0.1117	0.1488	0.0000	418.4691	418.4691	0.0251	0.0000	419.0977
<b>Maximum</b>	<b>16.6367</b>	<b>24.9135</b>	<b>18.8986</b>	<b>0.0378</b>	<b>2.6755</b>	<b>1.4392</b>	<b>3.6282</b>	<b>1.3466</b>	<b>1.3455</b>	<b>2.2231</b>	<b>0.0000</b>	<b>3,600.3080</b>	<b>3,600.3080</b>	<b>0.6154</b>	<b>0.0000</b>	<b>3,611.7203</b>





Silver Creek Mixed-Use Project - Santa Clara County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Energy	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
Mobile	0.8940	3.1331	9.5464	0.0301	2.5508	0.0284	2.5792	0.6809	0.0267	0.7076		3,034.0329	3,034.0329	0.1053		3,036.6650
<b>Total</b>	<b>3.6365</b>	<b>3.4317</b>	<b>17.4316</b>	<b>0.0319</b>	<b>2.5508</b>	<b>0.0880</b>	<b>2.6388</b>	<b>0.6809</b>	<b>0.0863</b>	<b>0.7672</b>	<b>0.0000</b>	<b>3,312.7740</b>	<b>3,312.7740</b>	<b>0.1240</b>	<b>4.8500e-003</b>	<b>3,317.3208</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Energy	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
Mobile	0.8940	3.1331	9.5464	0.0301	2.5508	0.0284	2.5792	0.6809	0.0267	0.7076		3,034.0329	3,034.0329	0.1053		3,036.6650
<b>Total</b>	<b>3.6365</b>	<b>3.4317</b>	<b>17.4316</b>	<b>0.0319</b>	<b>2.5508</b>	<b>0.0880</b>	<b>2.6388</b>	<b>0.6809</b>	<b>0.0863</b>	<b>0.7672</b>	<b>0.0000</b>	<b>3,312.7740</b>	<b>3,312.7740</b>	<b>0.1240</b>	<b>4.8500e-003</b>	<b>3,317.3208</b>

## Silver Creek Mixed-Use Project - Santa Clara County, Summer

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/3/2018	12/28/2018	5	20	
2	Site Preparation	Site Preparation	12/29/2018	1/1/2019	5	2	
3	Grading	Grading	1/2/2019	3/1/2019	5	43	
4	Building Construction	Building Construction	3/2/2019	12/6/2019	5	200	
5	Paving	Paving	12/7/2019	12/20/2019	5	10	
6	Architectural Coating	Architectural Coating	8/19/2019	1/3/2020	5	100	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.22**

**Residential Indoor: 190,350; Residential Outdoor: 63,450; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 2,002 (Architectural Coating – sqft)**

#### OffRoad Equipment

## Silver Creek Mixed-Use Project - Santa Clara County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Silver Creek Mixed-Use Project - Santa Clara County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	83.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Demolition - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3494	0.0000	0.3494	0.0529	0.0000	0.0529			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429		2,391.1659	2,391.1659	0.6058		2,406.3105
<b>Total</b>	<b>2.4838</b>	<b>24.3641</b>	<b>15.1107</b>	<b>0.0241</b>	<b>0.3494</b>	<b>1.4365</b>	<b>1.7859</b>	<b>0.0529</b>	<b>1.3429</b>	<b>1.3958</b>		<b>2,391.1659</b>	<b>2,391.1659</b>	<b>0.6058</b>		<b>2,406.3105</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.2 Demolition - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0151	0.5135	0.0986	1.3000e-003	0.0280	2.0800e-003	0.0300	7.6600e-003	1.9900e-003	9.6500e-003		138.2123	138.2123	6.3300e-003		138.3706
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0359	0.4472	1.1200e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		111.4635	111.4635	3.3200e-003		111.5464
<b>Total</b>	<b>0.0699</b>	<b>0.5495</b>	<b>0.5458</b>	<b>2.4200e-003</b>	<b>0.1348</b>	<b>2.7700e-003</b>	<b>0.1375</b>	<b>0.0360</b>	<b>2.6300e-003</b>	<b>0.0386</b>		<b>249.6758</b>	<b>249.6758</b>	<b>9.6500e-003</b>		<b>249.9171</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1572	0.0000	0.1572	0.0238	0.0000	0.0238			0.0000			0.0000
Off-Road	2.4838	24.3641	15.1107	0.0241		1.4365	1.4365		1.3429	1.3429	0.0000	2,391.1659	2,391.1659	0.6058		2,406.3105
<b>Total</b>	<b>2.4838</b>	<b>24.3641</b>	<b>15.1107</b>	<b>0.0241</b>	<b>0.1572</b>	<b>1.4365</b>	<b>1.5937</b>	<b>0.0238</b>	<b>1.3429</b>	<b>1.3667</b>	<b>0.0000</b>	<b>2,391.1659</b>	<b>2,391.1659</b>	<b>0.6058</b>		<b>2,406.3105</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.2 Demolition - 2018**

**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	0.0151	0.5135	0.0986	1.3000e-003	0.0280	2.0800e-003	0.0300	7.6600e-003	1.9900e-003	9.6500e-003		138.2123	138.2123	6.3300e-003		138.3706
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0548	0.0359	0.4472	1.1200e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		111.4635	111.4635	3.3200e-003		111.5464
<b>Total</b>	<b>0.0699</b>	<b>0.5495</b>	<b>0.5458</b>	<b>2.4200e-003</b>	<b>0.1348</b>	<b>2.7700e-003</b>	<b>0.1375</b>	<b>0.0360</b>	<b>2.6300e-003</b>	<b>0.0386</b>		<b>249.6758</b>	<b>249.6758</b>	<b>9.6500e-003</b>		<b>249.9171</b>

**3.3 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.9523</b>	<b>6.7518</b>	<b>2.9537</b>	<b>0.8761</b>	<b>3.8298</b>		<b>1,735.3630</b>	<b>1,735.3630</b>	<b>0.5402</b>		<b>1,748.8690</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.3 Site Preparation - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0337	0.0221	0.2752	6.9000e-004	0.0657	4.3000e-004	0.0662	0.0174	3.9000e-004	0.0178		68.5929	68.5929	2.0400e-003		68.6440
<b>Total</b>	<b>0.0337</b>	<b>0.0221</b>	<b>0.2752</b>	<b>6.9000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>68.5929</b>	<b>68.5929</b>	<b>2.0400e-003</b>		<b>68.6440</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
<b>Total</b>	<b>1.8061</b>	<b>20.7472</b>	<b>8.0808</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.9523</b>	<b>3.5621</b>	<b>1.3292</b>	<b>0.8761</b>	<b>2.2052</b>	<b>0.0000</b>	<b>1,735.3630</b>	<b>1,735.3630</b>	<b>0.5402</b>		<b>1,748.8690</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.3 Site Preparation - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0337	0.0221	0.2752	6.9000e-004	0.0657	4.3000e-004	0.0662	0.0174	3.9000e-004	0.0178		68.5929	68.5929	2.0400e-003		68.6440
<b>Total</b>	<b>0.0337</b>	<b>0.0221</b>	<b>0.2752</b>	<b>6.9000e-004</b>	<b>0.0657</b>	<b>4.3000e-004</b>	<b>0.0662</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>68.5929</b>	<b>68.5929</b>	<b>2.0400e-003</b>		<b>68.6440</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118		1,704.9189	1,704.9189	0.5394		1,718.4044
<b>Total</b>	<b>1.7123</b>	<b>19.4821</b>	<b>7.8893</b>	<b>0.0172</b>	<b>5.7996</b>	<b>0.8824</b>	<b>6.6819</b>	<b>2.9537</b>	<b>0.8118</b>	<b>3.7655</b>		<b>1,704.9189</b>	<b>1,704.9189</b>	<b>0.5394</b>		<b>1,718.4044</b>



Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0193	0.2448	6.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		66.5583	66.5583	1.8000e-003		66.6033
<b>Total</b>	<b>0.0304</b>	<b>0.0193</b>	<b>0.2448</b>	<b>6.7000e-004</b>	<b>0.0657</b>	<b>4.2000e-004</b>	<b>0.0661</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>66.5583</b>	<b>66.5583</b>	<b>1.8000e-003</b>		<b>66.6033</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.7123	19.4821	7.8893	0.0172		0.8824	0.8824		0.8118	0.8118	0.0000	1,704.9189	1,704.9189	0.5394		1,718.4044
<b>Total</b>	<b>1.7123</b>	<b>19.4821</b>	<b>7.8893</b>	<b>0.0172</b>	<b>2.6098</b>	<b>0.8824</b>	<b>3.4922</b>	<b>1.3292</b>	<b>0.8118</b>	<b>2.1409</b>	<b>0.0000</b>	<b>1,704.9189</b>	<b>1,704.9189</b>	<b>0.5394</b>		<b>1,718.4044</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0193	0.2448	6.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		66.5583	66.5583	1.8000e-003		66.6033
<b>Total</b>	<b>0.0304</b>	<b>0.0193</b>	<b>0.2448</b>	<b>6.7000e-004</b>	<b>0.0657</b>	<b>4.2000e-004</b>	<b>0.0661</b>	<b>0.0174</b>	<b>3.9000e-004</b>	<b>0.0178</b>		<b>66.5583</b>	<b>66.5583</b>	<b>1.8000e-003</b>		<b>66.6033</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.5693	0.0000	4.5693	2.4891	0.0000	2.4891			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775		1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>4.5693</b>	<b>0.7365</b>	<b>5.3058</b>	<b>2.4891</b>	<b>0.6775</b>	<b>3.1666</b>		<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1567	5.3188	1.0372	0.0140	0.3048	0.0207	0.3255	0.0835	0.0198	0.1033		1,492.0543	1,492.0543	0.0680		1,493.7530
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0193	0.2448	6.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		66.5583	66.5583	1.8000e-003		66.6033
<b>Total</b>	<b>0.1871</b>	<b>5.3381</b>	<b>1.2820</b>	<b>0.0147</b>	<b>0.3705</b>	<b>0.0211</b>	<b>0.3916</b>	<b>0.1010</b>	<b>0.0202</b>	<b>0.1211</b>		<b>1,558.6125</b>	<b>1,558.6125</b>	<b>0.0698</b>		<b>1,560.3563</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.0562	0.0000	2.0562	1.1201	0.0000	1.1201			0.0000			0.0000
Off-Road	1.4197	16.0357	6.6065	0.0141		0.7365	0.7365		0.6775	0.6775	0.0000	1,396.3909	1,396.3909	0.4418		1,407.4359
<b>Total</b>	<b>1.4197</b>	<b>16.0357</b>	<b>6.6065</b>	<b>0.0141</b>	<b>2.0562</b>	<b>0.7365</b>	<b>2.7927</b>	<b>1.1201</b>	<b>0.6775</b>	<b>1.7976</b>	<b>0.0000</b>	<b>1,396.3909</b>	<b>1,396.3909</b>	<b>0.4418</b>		<b>1,407.4359</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1567	5.3188	1.0372	0.0140	0.3048	0.0207	0.3255	0.0835	0.0198	0.1033		1,492.0543	1,492.0543	0.0680		1,493.7530
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0304	0.0193	0.2448	6.7000e-004	0.0657	4.2000e-004	0.0661	0.0174	3.9000e-004	0.0178		66.5583	66.5583	1.8000e-003		66.6033
<b>Total</b>	<b>0.1871</b>	<b>5.3381</b>	<b>1.2820</b>	<b>0.0147</b>	<b>0.3705</b>	<b>0.0211</b>	<b>0.3916</b>	<b>0.1010</b>	<b>0.0202</b>	<b>0.1211</b>		<b>1,558.6125</b>	<b>1,558.6125</b>	<b>0.0698</b>		<b>1,560.3563</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846		2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>		<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0771	1.9922	0.5105	4.4400e-003	0.1083	0.0144	0.1227	0.0312	0.0138	0.0450		468.8595	468.8595	0.0223		469.4157
Worker	0.3156	0.2006	2.5396	6.9300e-003	0.6818	4.3500e-003	0.6862	0.1809	4.0000e-003	0.1849		690.5419	690.5419	0.0187		691.0092
<b>Total</b>	<b>0.3927</b>	<b>2.1928</b>	<b>3.0501</b>	<b>0.0114</b>	<b>0.7902</b>	<b>0.0188</b>	<b>0.8089</b>	<b>0.2120</b>	<b>0.0178</b>	<b>0.2298</b>		<b>1,159.4013</b>	<b>1,159.4013</b>	<b>0.0410</b>		<b>1,160.4249</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2721	15.9802	13.4870	0.0220		0.9158	0.9158		0.8846	0.8846	0.0000	2,018.0224	2,018.0224	0.3879		2,027.7210
<b>Total</b>	<b>2.2721</b>	<b>15.9802</b>	<b>13.4870</b>	<b>0.0220</b>		<b>0.9158</b>	<b>0.9158</b>		<b>0.8846</b>	<b>0.8846</b>	<b>0.0000</b>	<b>2,018.0224</b>	<b>2,018.0224</b>	<b>0.3879</b>		<b>2,027.7210</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0771	1.9922	0.5105	4.4400e-003	0.1083	0.0144	0.1227	0.0312	0.0138	0.0450		468.8595	468.8595	0.0223		469.4157
Worker	0.3156	0.2006	2.5396	6.9300e-003	0.6818	4.3500e-003	0.6862	0.1809	4.0000e-003	0.1849		690.5419	690.5419	0.0187		691.0092
<b>Total</b>	<b>0.3927</b>	<b>2.1928</b>	<b>3.0501</b>	<b>0.0114</b>	<b>0.7902</b>	<b>0.0188</b>	<b>0.8089</b>	<b>0.2120</b>	<b>0.0178</b>	<b>0.2298</b>		<b>1,159.4013</b>	<b>1,159.4013</b>	<b>0.0410</b>		<b>1,160.4249</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815		1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9615</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>		<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3978	1.0900e-003	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		108.1572	108.1572	2.9300e-003		108.2304
<b>Total</b>	<b>0.0494</b>	<b>0.0314</b>	<b>0.3978</b>	<b>1.0900e-003</b>	<b>0.1068</b>	<b>6.8000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>108.1572</b>	<b>108.1572</b>	<b>2.9300e-003</b>		<b>108.2304</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9038	9.1743	8.9025	0.0135		0.5225	0.5225		0.4815	0.4815	0.0000	1,325.0953	1,325.0953	0.4112		1,335.3751
Paving	0.0576					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>0.9615</b>	<b>9.1743</b>	<b>8.9025</b>	<b>0.0135</b>		<b>0.5225</b>	<b>0.5225</b>		<b>0.4815</b>	<b>0.4815</b>	<b>0.0000</b>	<b>1,325.0953</b>	<b>1,325.0953</b>	<b>0.4112</b>		<b>1,335.3751</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0494	0.0314	0.3978	1.0900e-003	0.1068	6.8000e-004	0.1075	0.0283	6.3000e-004	0.0290		108.1572	108.1572	2.9300e-003		108.2304
<b>Total</b>	<b>0.0494</b>	<b>0.0314</b>	<b>0.3978</b>	<b>1.0900e-003</b>	<b>0.1068</b>	<b>6.8000e-004</b>	<b>0.1075</b>	<b>0.0283</b>	<b>6.3000e-004</b>	<b>0.0290</b>		<b>108.1572</b>	<b>108.1572</b>	<b>2.9300e-003</b>		<b>108.2304</b>

**3.7 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>13.9073</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>



Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.7 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0647	0.0411	0.5202	1.4200e-003	0.1397	8.9000e-004	0.1405	0.0370	8.2000e-004	0.0379		141.4363	141.4363	3.8300e-003		141.5320
<b>Total</b>	<b>0.0647</b>	<b>0.0411</b>	<b>0.5202</b>	<b>1.4200e-003</b>	<b>0.1397</b>	<b>8.9000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.2000e-004</b>	<b>0.0379</b>		<b>141.4363</b>	<b>141.4363</b>	<b>3.8300e-003</b>		<b>141.5320</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
<b>Total</b>	<b>13.9073</b>	<b>1.8354</b>	<b>1.8413</b>	<b>2.9700e-003</b>		<b>0.1288</b>	<b>0.1288</b>		<b>0.1288</b>	<b>0.1288</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0238</b>		<b>282.0423</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.7 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0647	0.0411	0.5202	1.4200e-003	0.1397	8.9000e-004	0.1405	0.0370	8.2000e-004	0.0379		141.4363	141.4363	3.8300e-003		141.5320
<b>Total</b>	<b>0.0647</b>	<b>0.0411</b>	<b>0.5202</b>	<b>1.4200e-003</b>	<b>0.1397</b>	<b>8.9000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.2000e-004</b>	<b>0.0379</b>		<b>141.4363</b>	<b>141.4363</b>	<b>3.8300e-003</b>		<b>141.5320</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.8830</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>		<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0591	0.0363	0.4676	1.3800e-003	0.1397	8.7000e-004	0.1405	0.0370	8.0000e-004	0.0378		137.0211	137.0211	3.3500e-003		137.1049
<b>Total</b>	<b>0.0591</b>	<b>0.0363</b>	<b>0.4676</b>	<b>1.3800e-003</b>	<b>0.1397</b>	<b>8.7000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.0000e-004</b>	<b>0.0378</b>		<b>137.0211</b>	<b>137.0211</b>	<b>3.3500e-003</b>		<b>137.1049</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	13.6408					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
<b>Total</b>	<b>13.8830</b>	<b>1.6838</b>	<b>1.8314</b>	<b>2.9700e-003</b>		<b>0.1109</b>	<b>0.1109</b>		<b>0.1109</b>	<b>0.1109</b>	<b>0.0000</b>	<b>281.4481</b>	<b>281.4481</b>	<b>0.0218</b>		<b>281.9928</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0591	0.0363	0.4676	1.3800e-003	0.1397	8.7000e-004	0.1405	0.0370	8.0000e-004	0.0378		137.0211	137.0211	3.3500e-003		137.1049
<b>Total</b>	<b>0.0591</b>	<b>0.0363</b>	<b>0.4676</b>	<b>1.3800e-003</b>	<b>0.1397</b>	<b>8.7000e-004</b>	<b>0.1405</b>	<b>0.0370</b>	<b>8.0000e-004</b>	<b>0.0378</b>		<b>137.0211</b>	<b>137.0211</b>	<b>3.3500e-003</b>		<b>137.1049</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Silver Creek Mixed-Use Project - Santa Clara County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8940	3.1331	9.5464	0.0301	2.5508	0.0284	2.5792	0.6809	0.0267	0.7076		3,034.0329	3,034.0329	0.1053		3,036.6650
Unmitigated	0.8940	3.1331	9.5464	0.0301	2.5508	0.0284	2.5792	0.6809	0.0267	0.7076		3,034.0329	3,034.0329	0.1053		3,036.6650

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	511.36	511.36	511.36	1,181,041	1,181,041
Enclosed Parking with Elevator	0.00	0.00	0.00		
Junior High School	11.04	0.00	0.00	17,724	17,724
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>522.40</b>	<b>511.36</b>	<b>511.36</b>	<b>1,198,765</b>	<b>1,198,765</b>

4.3 Trip Type Information

Silver Creek Mixed-Use Project - Santa Clara County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior High School	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Other Asphalt Surfaces	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Apartments Mid Rise	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Silver Creek Mixed-Use Project - Santa Clara County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345
NaturalGas Unmitigated	0.0243	0.2086	0.0968	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.7612	264.7612	5.0700e-003	4.8500e-003	266.3345

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	2052.48	0.0221	0.1892	0.0805	1.2100e-003		0.0153	0.0153		0.0153	0.0153		241.4681	241.4681	4.6300e-003	4.4300e-003	242.9030
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	197.992	2.1400e-003	0.0194	0.0163	1.2000e-004		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		23.2932	23.2932	4.5000e-004	4.3000e-004	23.4316
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0243</b>	<b>0.2086</b>	<b>0.0968</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>264.7612</b>	<b>264.7612</b>	<b>5.0800e-003</b>	<b>4.8600e-003</b>	<b>266.3345</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	2.05248	0.0221	0.1892	0.0805	1.2100e-003		0.0153	0.0153		0.0153	0.0153		241.4681	241.4681	4.6300e-003	4.4300e-003	242.9030
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	0.197992	2.1400e-003	0.0194	0.0163	1.2000e-004		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003		23.2932	23.2932	4.5000e-004	4.3000e-004	23.4316
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0243</b>	<b>0.2086</b>	<b>0.0968</b>	<b>1.3300e-003</b>		<b>0.0168</b>	<b>0.0168</b>		<b>0.0168</b>	<b>0.0168</b>		<b>264.7612</b>	<b>264.7612</b>	<b>5.0800e-003</b>	<b>4.8600e-003</b>	<b>266.3345</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**



Silver Creek Mixed-Use Project - Santa Clara County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213
Unmitigated	2.7182	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428	0.0000	13.9798	13.9798	0.0137	0.0000	14.3213

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3737					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1069					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2376	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9798	13.9798	0.0137		14.3213
<b>Total</b>	<b>2.7182</b>	<b>0.0901</b>	<b>7.7884</b>	<b>4.1000e-004</b>		<b>0.0428</b>	<b>0.0428</b>		<b>0.0428</b>	<b>0.0428</b>	<b>0.0000</b>	<b>13.9798</b>	<b>13.9798</b>	<b>0.0137</b>	<b>0.0000</b>	<b>14.3213</b>

Silver Creek Mixed-Use Project - Santa Clara County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3737					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.1069					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2376	0.0901	7.7884	4.1000e-004		0.0428	0.0428		0.0428	0.0428		13.9798	13.9798	0.0137		14.3213
<b>Total</b>	<b>2.7182</b>	<b>0.0901</b>	<b>7.7884</b>	<b>4.1000e-004</b>		<b>0.0428</b>	<b>0.0428</b>		<b>0.0428</b>	<b>0.0428</b>	<b>0.0000</b>	<b>13.9798</b>	<b>13.9798</b>	<b>0.0137</b>	<b>0.0000</b>	<b>14.3213</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

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Silver Creek Mixed-Use Project - Santa Clara County, 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**

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Silver Creek Mixed-Use Project - Santa Clara County, Annual

**Silver Creek Mixed-Use Project**  
**Santa Clara County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior High School	3.90	1000sqft	0.49	3,900.00	0
Enclosed Parking with Elevator	50.00	Space	0.00	20,000.00	0
Other Asphalt Surfaces	9.77	1000sqft	0.22	9,768.00	0
Parking Lot	9.00	Space	0.00	3,600.00	0
Apartments Mid Rise	94.00	Dwelling Unit	0.78	94,000.00	269

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.2	<b>Precipitation Freq (Days)</b>	58
<b>Climate Zone</b>	4			<b>Operational Year</b>	2020
<b>Utility Company</b>	Pacific Gas & Electric Company				
<b>CO2 Intensity (lb/MWhr)</b>	641.35	<b>CH4 Intensity (lb/MWhr)</b>	0.029	<b>N2O Intensity (lb/MWhr)</b>	0.006

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

Silver Creek Mixed-Use Project - Santa Clara County, Annual

Project Characteristics -

Land Use - Apts built on top of parking, so no parking acreage

Construction Phase - Arch coating extended to overlap with building cons. for more realistic scenario. Applicant provided schedule.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Demolition - 7099 sf per applicant provided info

Grading - 6,000 CY per applicant provided information

Vehicle Trips - Per project traffic study: 2.83 for school and 5.44 for apts

Woodstoves - No fire place per site plans

Energy Use - Apt reduced by 28% to meet current Title 24 standards

Construction Off-road Equipment Mitigation - Per BAAQMD Basic Construction Measure

Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblAreaCoating	Area_EF_Parking	150	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	10.00	100.00
tblConstructionPhase	NumDays	4.00	43.00
tblConstructionPhase	PhaseEndDate	5/8/2020	1/3/2020
tblConstructionPhase	PhaseStartDate	12/21/2019	8/19/2019
tblEnergyUse	LightingElect	741.44	533.84
tblEnergyUse	NT24E	3,277.06	2,359.48
tblEnergyUse	NT24NG	3,155.00	2,271.60
tblEnergyUse	T24E	392.47	282.58

## Silver Creek Mixed-Use Project - Santa Clara County, Annual

tblEnergyUse	T24NG	7,914.07	5,698.13
tblFireplaces	FireplaceDayYear	11.14	0.00
tblFireplaces	FireplaceHourDay	3.50	0.00
tblFireplaces	FireplaceWoodMass	228.80	0.00
tblFireplaces	NumberGas	14.10	0.00
tblFireplaces	NumberNoFireplace	3.76	0.00
tblFireplaces	NumberWood	15.98	0.00
tblGrading	AcresOfGrading	16.13	1.50
tblGrading	MaterialExported	0.00	6,000.00
tblLandUse	BuildingSpaceSquareFeet	9,770.00	9,768.00
tblLandUse	LandUseSquareFeet	9,770.00	9,768.00
tblLandUse	LotAcreage	0.09	0.49
tblLandUse	LotAcreage	0.45	0.00
tblLandUse	LotAcreage	0.08	0.00
tblLandUse	LotAcreage	2.47	0.78
tblProjectCharacteristics	OperationalYear	2018	2020
tblVehicleTrips	ST_TR	6.39	5.44
tblVehicleTrips	SU_TR	5.86	5.44
tblVehicleTrips	WD_TR	6.65	5.44
tblVehicleTrips	WD_TR	13.78	2.83
tblWoodstoves	NumberCatalytic	1.88	0.00
tblWoodstoves	NumberNoncatalytic	1.88	0.00
tblWoodstoves	WoodstoveDayYear	14.12	0.00
tblWoodstoves	WoodstoveWoodMass	582.40	0.00

## 2.0 Emissions Summary

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Silver Creek Mixed-Use Project - Santa Clara County, Annual

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0264	0.2597	0.1604	2.7000e-004	0.0106	0.0149	0.0255	3.8400e-003	0.0139	0.0177	0.0000	24.6943	24.6943	5.8300e-003	0.0000	24.8400
2019	0.9832	2.4315	1.9674	4.1900e-003	0.1952	0.1191	0.3143	0.0810	0.1144	0.1954	0.0000	366.2160	366.2160	0.0522	0.0000	367.5210
2020	0.0209	2.5900e-003	3.3900e-003	1.0000e-005	2.0000e-004	1.7000e-004	3.7000e-004	5.0000e-005	1.7000e-004	2.2000e-004	0.0000	0.5564	0.5564	3.0000e-005	0.0000	0.5573
<b>Maximum</b>	<b>0.9832</b>	<b>2.4315</b>	<b>1.9674</b>	<b>4.1900e-003</b>	<b>0.1952</b>	<b>0.1191</b>	<b>0.3143</b>	<b>0.0810</b>	<b>0.1144</b>	<b>0.1954</b>	<b>0.0000</b>	<b>366.2160</b>	<b>366.2160</b>	<b>0.0522</b>	<b>0.0000</b>	<b>367.5210</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2018	0.0264	0.2597	0.1604	2.7000e-004	5.5200e-003	0.0149	0.0204	1.9200e-003	0.0139	0.0158	0.0000	24.6943	24.6943	5.8300e-003	0.0000	24.8400
2019	0.9832	2.4315	1.9674	4.1900e-003	0.1380	0.1191	0.2571	0.0500	0.1144	0.1643	0.0000	366.2157	366.2157	0.0522	0.0000	367.5207
2020	0.0209	2.5900e-003	3.3900e-003	1.0000e-005	2.0000e-004	1.7000e-004	3.7000e-004	5.0000e-005	1.7000e-004	2.2000e-004	0.0000	0.5564	0.5564	3.0000e-005	0.0000	0.5573
<b>Maximum</b>	<b>0.9832</b>	<b>2.4315</b>	<b>1.9674</b>	<b>4.1900e-003</b>	<b>0.1380</b>	<b>0.1191</b>	<b>0.2571</b>	<b>0.0500</b>	<b>0.1144</b>	<b>0.1643</b>	<b>0.0000</b>	<b>366.2157</b>	<b>366.2157</b>	<b>0.0522</b>	<b>0.0000</b>	<b>367.5207</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.25	0.00	18.33	38.83	0.00	15.45	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-3-2018	3-2-2019	0.7819	0.7819
2	3-3-2019	6-2-2019	0.6857	0.6857
3	6-3-2019	9-2-2019	0.7696	0.7696
4	9-3-2019	12-2-2019	1.1948	1.1948
5	12-3-2019	3-2-2020	0.2621	0.2621
		Highest	1.1948	1.1948

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4741	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693
Energy	4.4300e-003	0.0381	0.0177	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	177.0919	177.0919	6.8700e-003	2.0500e-003	177.8745
Mobile	0.1414	0.5874	1.6504	5.1300e-003	0.4458	5.1500e-003	0.4509	0.1193	4.8300e-003	0.1242	0.0000	469.2741	469.2741	0.0170	0.0000	469.7001
Waste						0.0000	0.0000		0.0000	0.0000	9.8065	0.0000	9.8065	0.5796	0.0000	24.2952
Water						0.0000	0.0000		0.0000	0.0000	1.9685	13.9092	15.8777	0.2028	4.9000e-003	22.4095
<b>Total</b>	<b>0.6199</b>	<b>0.6335</b>	<b>2.3690</b>	<b>5.4100e-003</b>	<b>0.4458</b>	<b>0.0121</b>	<b>0.4578</b>	<b>0.1193</b>	<b>0.0117</b>	<b>0.1311</b>	<b>11.7750</b>	<b>661.4166</b>	<b>673.1916</b>	<b>0.8074</b>	<b>6.9500e-003</b>	<b>695.4486</b>



Silver Creek Mixed-Use Project - Santa Clara County, Annual

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4741	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693
Energy	4.4300e-003	0.0381	0.0177	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	177.0919	177.0919	6.8700e-003	2.0500e-003	177.8745
Mobile	0.1414	0.5874	1.6504	5.1300e-003	0.4458	5.1500e-003	0.4509	0.1193	4.8300e-003	0.1242	0.0000	469.2741	469.2741	0.0170	0.0000	469.7001
Waste						0.0000	0.0000		0.0000	0.0000	9.8065	0.0000	9.8065	0.5796	0.0000	24.2952
Water						0.0000	0.0000		0.0000	0.0000	1.9685	13.9092	15.8777	0.2028	4.9000e-003	22.4095
<b>Total</b>	<b>0.6199</b>	<b>0.6335</b>	<b>2.3690</b>	<b>5.4100e-003</b>	<b>0.4458</b>	<b>0.0121</b>	<b>0.4578</b>	<b>0.1193</b>	<b>0.0117</b>	<b>0.1311</b>	<b>11.7750</b>	<b>661.4166</b>	<b>673.1916</b>	<b>0.8074</b>	<b>6.9500e-003</b>	<b>695.4486</b>

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

**3.0 Construction Detail**

**Construction Phase**

## Silver Creek Mixed-Use Project - Santa Clara County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/3/2018	12/28/2018	5	20	
2	Site Preparation	Site Preparation	12/29/2018	1/1/2019	5	2	
3	Grading	Grading	1/2/2019	3/1/2019	5	43	
4	Building Construction	Building Construction	3/2/2019	12/6/2019	5	200	
5	Paving	Paving	12/7/2019	12/20/2019	5	10	
6	Architectural Coating	Architectural Coating	8/19/2019	1/3/2020	5	100	

**Acres of Grading (Site Preparation Phase): 1**

**Acres of Grading (Grading Phase): 1.5**

**Acres of Paving: 0.22**

**Residential Indoor: 190,350; Residential Outdoor: 63,450; Non-Residential Indoor: 5,850; Non-Residential Outdoor: 1,950; Striped Parking Area: 2,002 (Architectural Coating – sqft)**

**OffRoad Equipment**

## Silver Creek Mixed-Use Project - Santa Clara County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Silver Creek Mixed-Use Project - Santa Clara County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	32.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	750.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	83.00	16.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	17.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Clean Paved Roads

**3.2 Demolition - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4900e-003	0.0000	3.4900e-003	5.3000e-004	0.0000	5.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
<b>Total</b>	<b>0.0248</b>	<b>0.2436</b>	<b>0.1511</b>	<b>2.4000e-004</b>	<b>3.4900e-003</b>	<b>0.0144</b>	<b>0.0179</b>	<b>5.3000e-004</b>	<b>0.0134</b>	<b>0.0140</b>	<b>0.0000</b>	<b>21.6923</b>	<b>21.6923</b>	<b>5.5000e-003</b>	<b>0.0000</b>	<b>21.8297</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.2 Demolition - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.5000e-004	5.2500e-003	1.0200e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.2453	1.2453	6.0000e-005	0.0000	1.2467
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.0000e-004	4.1000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9407	0.9407	3.0000e-005	0.0000	0.9414
<b>Total</b>	<b>6.7000e-004</b>	<b>5.6500e-003</b>	<b>5.1200e-003</b>	<b>2.0000e-005</b>	<b>1.3000e-003</b>	<b>3.0000e-005</b>	<b>1.3300e-003</b>	<b>3.4000e-004</b>	<b>3.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>2.1859</b>	<b>2.1859</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.1881</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.5700e-003	0.0000	1.5700e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e-003	0.0000	21.8297
<b>Total</b>	<b>0.0248</b>	<b>0.2436</b>	<b>0.1511</b>	<b>2.4000e-004</b>	<b>1.5700e-003</b>	<b>0.0144</b>	<b>0.0159</b>	<b>2.4000e-004</b>	<b>0.0134</b>	<b>0.0137</b>	<b>0.0000</b>	<b>21.6923</b>	<b>21.6923</b>	<b>5.5000e-003</b>	<b>0.0000</b>	<b>21.8297</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.2 Demolition - 2018**

**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	1.5000e-004	5.2500e-003	1.0200e-003	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.2453	1.2453	6.0000e-005	0.0000	1.2467
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	4.0000e-004	4.1000e-003	1.0000e-005	1.0300e-003	1.0000e-005	1.0400e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.9407	0.9407	3.0000e-005	0.0000	0.9414
<b>Total</b>	<b>6.7000e-004</b>	<b>5.6500e-003</b>	<b>5.1200e-003</b>	<b>2.0000e-005</b>	<b>1.3000e-003</b>	<b>3.0000e-005</b>	<b>1.3300e-003</b>	<b>3.4000e-004</b>	<b>3.0000e-005</b>	<b>3.7000e-004</b>	<b>0.0000</b>	<b>2.1859</b>	<b>2.1859</b>	<b>9.0000e-005</b>	<b>0.0000</b>	<b>2.1881</b>

**3.3 Site Preparation - 2018**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0104	4.0400e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933
<b>Total</b>	<b>9.0000e-004</b>	<b>0.0104</b>	<b>4.0400e-003</b>	<b>1.0000e-005</b>	<b>5.8000e-003</b>	<b>4.8000e-004</b>	<b>6.2800e-003</b>	<b>2.9500e-003</b>	<b>4.4000e-004</b>	<b>3.3900e-003</b>	<b>0.0000</b>	<b>0.7872</b>	<b>0.7872</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>0.7933</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.3 Site Preparation - 2018**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0289	0.0289	0.0000	0.0000	0.0290
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0289</b>	<b>0.0289</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0290</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0000e-004	0.0104	4.0400e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.4000e-004	4.4000e-004	0.0000	0.7872	0.7872	2.5000e-004	0.0000	0.7933
<b>Total</b>	<b>9.0000e-004</b>	<b>0.0104</b>	<b>4.0400e-003</b>	<b>1.0000e-005</b>	<b>2.6100e-003</b>	<b>4.8000e-004</b>	<b>3.0900e-003</b>	<b>1.3300e-003</b>	<b>4.4000e-004</b>	<b>1.7700e-003</b>	<b>0.0000</b>	<b>0.7872</b>	<b>0.7872</b>	<b>2.5000e-004</b>	<b>0.0000</b>	<b>0.7933</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.3 Site Preparation - 2018**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.3000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0289	0.0289	0.0000	0.0000	0.0290
<b>Total</b>	<b>2.0000e-005</b>	<b>1.0000e-005</b>	<b>1.3000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0289</b>	<b>0.0289</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0290</b>

**3.3 Site Preparation - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	9.7400e-003	3.9400e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.1000e-004	4.1000e-004	0.0000	0.7733	0.7733	2.4000e-004	0.0000	0.7795
<b>Total</b>	<b>8.6000e-004</b>	<b>9.7400e-003</b>	<b>3.9400e-003</b>	<b>1.0000e-005</b>	<b>5.8000e-003</b>	<b>4.4000e-004</b>	<b>6.2400e-003</b>	<b>2.9500e-003</b>	<b>4.1000e-004</b>	<b>3.3600e-003</b>	<b>0.0000</b>	<b>0.7733</b>	<b>0.7733</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7795</b>



Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.3 Site Preparation - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0281	0.0281	0.0000	0.0000	0.0281
<b>Total</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0281</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6000e-004	9.7400e-003	3.9400e-003	1.0000e-005		4.4000e-004	4.4000e-004		4.1000e-004	4.1000e-004	0.0000	0.7733	0.7733	2.4000e-004	0.0000	0.7795
<b>Total</b>	<b>8.6000e-004</b>	<b>9.7400e-003</b>	<b>3.9400e-003</b>	<b>1.0000e-005</b>	<b>2.6100e-003</b>	<b>4.4000e-004</b>	<b>3.0500e-003</b>	<b>1.3300e-003</b>	<b>4.1000e-004</b>	<b>1.7400e-003</b>	<b>0.0000</b>	<b>0.7733</b>	<b>0.7733</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>0.7795</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.3 Site Preparation - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-005	1.0000e-005	1.1000e-004	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0281	0.0281	0.0000	0.0000	0.0281
<b>Total</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>1.1000e-004</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0281</b>	<b>0.0281</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0281</b>

**3.4 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0982	0.0000	0.0982	0.0535	0.0000	0.0535	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0305	0.3448	0.1420	3.0000e-004		0.0158	0.0158		0.0146	0.0146	0.0000	27.2359	27.2359	8.6200e-003	0.0000	27.4513
<b>Total</b>	<b>0.0305</b>	<b>0.3448</b>	<b>0.1420</b>	<b>3.0000e-004</b>	<b>0.0982</b>	<b>0.0158</b>	<b>0.1141</b>	<b>0.0535</b>	<b>0.0146</b>	<b>0.0681</b>	<b>0.0000</b>	<b>27.2359</b>	<b>27.2359</b>	<b>8.6200e-003</b>	<b>0.0000</b>	<b>27.4513</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.4 Grading - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4100e-003	0.1168	0.0231	3.0000e-004	6.3600e-003	4.5000e-004	6.8000e-003	1.7500e-003	4.3000e-004	2.1800e-003	0.0000	28.8992	28.8992	1.3500e-003	0.0000	28.9330
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	4.7000e-004	4.8000e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2076	1.2076	3.0000e-005	0.0000	1.2084
<b>Total</b>	<b>4.0300e-003</b>	<b>0.1172</b>	<b>0.0279</b>	<b>3.1000e-004</b>	<b>7.7200e-003</b>	<b>4.6000e-004</b>	<b>8.1700e-003</b>	<b>2.1100e-003</b>	<b>4.4000e-004</b>	<b>2.5500e-003</b>	<b>0.0000</b>	<b>30.1068</b>	<b>30.1068</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>30.1414</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0241	0.0000	0.0241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0305	0.3448	0.1420	3.0000e-004		0.0158	0.0158		0.0146	0.0146	0.0000	27.2358	27.2358	8.6200e-003	0.0000	27.4513
<b>Total</b>	<b>0.0305</b>	<b>0.3448</b>	<b>0.1420</b>	<b>3.0000e-004</b>	<b>0.0442</b>	<b>0.0158</b>	<b>0.0600</b>	<b>0.0241</b>	<b>0.0146</b>	<b>0.0387</b>	<b>0.0000</b>	<b>27.2358</b>	<b>27.2358</b>	<b>8.6200e-003</b>	<b>0.0000</b>	<b>27.4513</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.4 Grading - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.4100e-003	0.1168	0.0231	3.0000e-004	6.3600e-003	4.5000e-004	6.8000e-003	1.7500e-003	4.3000e-004	2.1800e-003	0.0000	28.8992	28.8992	1.3500e-003	0.0000	28.9330
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2000e-004	4.7000e-004	4.8000e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3700e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2076	1.2076	3.0000e-005	0.0000	1.2084
<b>Total</b>	<b>4.0300e-003</b>	<b>0.1172</b>	<b>0.0279</b>	<b>3.1000e-004</b>	<b>7.7200e-003</b>	<b>4.6000e-004</b>	<b>8.1700e-003</b>	<b>2.1100e-003</b>	<b>4.4000e-004</b>	<b>2.5500e-003</b>	<b>0.0000</b>	<b>30.1068</b>	<b>30.1068</b>	<b>1.3800e-003</b>	<b>0.0000</b>	<b>30.1414</b>

**3.5 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2272	1.5980	1.3487	2.2000e-003		0.0916	0.0916		0.0885	0.0885	0.0000	183.0719	183.0719	0.0352	0.0000	183.9518
<b>Total</b>	<b>0.2272</b>	<b>1.5980</b>	<b>1.3487</b>	<b>2.2000e-003</b>		<b>0.0916</b>	<b>0.0916</b>		<b>0.0885</b>	<b>0.0885</b>	<b>0.0000</b>	<b>183.0719</b>	<b>183.0719</b>	<b>0.0352</b>	<b>0.0000</b>	<b>183.9518</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.5 Building Construction - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.2020	0.0542	4.4000e-004	0.0105	1.4500e-003	0.0120	3.0400e-003	1.3900e-003	4.4300e-003	0.0000	42.0883	42.0883	2.0900e-003	0.0000	42.1405
Worker	0.0302	0.0225	0.2319	6.4000e-004	0.0658	4.3000e-004	0.0663	0.0175	4.0000e-004	0.0179	0.0000	58.2729	58.2729	1.5900e-003	0.0000	58.3126
<b>Total</b>	<b>0.0380</b>	<b>0.2245</b>	<b>0.2861</b>	<b>1.0800e-003</b>	<b>0.0764</b>	<b>1.8800e-003</b>	<b>0.0782</b>	<b>0.0206</b>	<b>1.7900e-003</b>	<b>0.0223</b>	<b>0.0000</b>	<b>100.3612</b>	<b>100.3612</b>	<b>3.6800e-003</b>	<b>0.0000</b>	<b>100.4531</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2272	1.5980	1.3487	2.2000e-003		0.0916	0.0916		0.0885	0.0885	0.0000	183.0717	183.0717	0.0352	0.0000	183.9515
<b>Total</b>	<b>0.2272</b>	<b>1.5980</b>	<b>1.3487</b>	<b>2.2000e-003</b>		<b>0.0916</b>	<b>0.0916</b>		<b>0.0885</b>	<b>0.0885</b>	<b>0.0000</b>	<b>183.0717</b>	<b>183.0717</b>	<b>0.0352</b>	<b>0.0000</b>	<b>183.9515</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.5 Building Construction - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8500e-003	0.2020	0.0542	4.4000e-004	0.0105	1.4500e-003	0.0120	3.0400e-003	1.3900e-003	4.4300e-003	0.0000	42.0883	42.0883	2.0900e-003	0.0000	42.1405
Worker	0.0302	0.0225	0.2319	6.4000e-004	0.0658	4.3000e-004	0.0663	0.0175	4.0000e-004	0.0179	0.0000	58.2729	58.2729	1.5900e-003	0.0000	58.3126
<b>Total</b>	<b>0.0380</b>	<b>0.2245</b>	<b>0.2861</b>	<b>1.0800e-003</b>	<b>0.0764</b>	<b>1.8800e-003</b>	<b>0.0782</b>	<b>0.0206</b>	<b>1.7900e-003</b>	<b>0.0223</b>	<b>0.0000</b>	<b>100.3612</b>	<b>100.3612</b>	<b>3.6800e-003</b>	<b>0.0000</b>	<b>100.4531</b>

**3.6 Paving - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.8100e-003</b>	<b>0.0459</b>	<b>0.0445</b>	<b>7.0000e-005</b>		<b>2.6100e-003</b>	<b>2.6100e-003</b>		<b>2.4100e-003</b>	<b>2.4100e-003</b>	<b>0.0000</b>	<b>6.0105</b>	<b>6.0105</b>	<b>1.8700e-003</b>	<b>0.0000</b>	<b>6.0572</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.6 Paving - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.8200e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4564	0.4564	1.0000e-005	0.0000	0.4567
<b>Total</b>	<b>2.4000e-004</b>	<b>1.8000e-004</b>	<b>1.8200e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4564</b>	<b>0.4564</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4567</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.5200e-003	0.0459	0.0445	7.0000e-005		2.6100e-003	2.6100e-003		2.4100e-003	2.4100e-003	0.0000	6.0105	6.0105	1.8700e-003	0.0000	6.0572
Paving	2.9000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.8100e-003</b>	<b>0.0459</b>	<b>0.0445</b>	<b>7.0000e-005</b>		<b>2.6100e-003</b>	<b>2.6100e-003</b>		<b>2.4100e-003</b>	<b>2.4100e-003</b>	<b>0.0000</b>	<b>6.0105</b>	<b>6.0105</b>	<b>1.8700e-003</b>	<b>0.0000</b>	<b>6.0572</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.6 Paving - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4000e-004	1.8000e-004	1.8200e-003	1.0000e-005	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4564	0.4564	1.0000e-005	0.0000	0.4567
<b>Total</b>	<b>2.4000e-004</b>	<b>1.8000e-004</b>	<b>1.8200e-003</b>	<b>1.0000e-005</b>	<b>5.2000e-004</b>	<b>0.0000</b>	<b>5.2000e-004</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>1.4000e-004</b>	<b>0.0000</b>	<b>0.4564</b>	<b>0.4564</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.4567</b>

**3.7 Architectural Coating - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0890	0.0893	1.4000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	12.3833	12.3833	1.0500e-003	0.0000	12.4094
<b>Total</b>	<b>0.6745</b>	<b>0.0890</b>	<b>0.0893</b>	<b>1.4000e-004</b>		<b>6.2500e-003</b>	<b>6.2500e-003</b>		<b>6.2500e-003</b>	<b>6.2500e-003</b>	<b>0.0000</b>	<b>12.3833</b>	<b>12.3833</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>12.4094</b>



Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.7 Architectural Coating - 2019**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2300e-003	0.0230	6.0000e-005	6.5400e-003	4.0000e-005	6.5800e-003	1.7400e-003	4.0000e-005	1.7800e-003	0.0000	5.7887	5.7887	1.6000e-004	0.0000	5.7926
<b>Total</b>	<b>2.9900e-003</b>	<b>2.2300e-003</b>	<b>0.0230</b>	<b>6.0000e-005</b>	<b>6.5400e-003</b>	<b>4.0000e-005</b>	<b>6.5800e-003</b>	<b>1.7400e-003</b>	<b>4.0000e-005</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>5.7887</b>	<b>5.7887</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.7926</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0129	0.0890	0.0893	1.4000e-004		6.2500e-003	6.2500e-003		6.2500e-003	6.2500e-003	0.0000	12.3833	12.3833	1.0500e-003	0.0000	12.4094
<b>Total</b>	<b>0.6745</b>	<b>0.0890</b>	<b>0.0893</b>	<b>1.4000e-004</b>		<b>6.2500e-003</b>	<b>6.2500e-003</b>		<b>6.2500e-003</b>	<b>6.2500e-003</b>	<b>0.0000</b>	<b>12.3833</b>	<b>12.3833</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>12.4094</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.7 Architectural Coating - 2019**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9900e-003	2.2300e-003	0.0230	6.0000e-005	6.5400e-003	4.0000e-005	6.5800e-003	1.7400e-003	4.0000e-005	1.7800e-003	0.0000	5.7887	5.7887	1.6000e-004	0.0000	5.7926
<b>Total</b>	<b>2.9900e-003</b>	<b>2.2300e-003</b>	<b>0.0230</b>	<b>6.0000e-005</b>	<b>6.5400e-003</b>	<b>4.0000e-005</b>	<b>6.5800e-003</b>	<b>1.7400e-003</b>	<b>4.0000e-005</b>	<b>1.7800e-003</b>	<b>0.0000</b>	<b>5.7887</b>	<b>5.7887</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>5.7926</b>

**3.7 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	2.5300e-003	2.7500e-003	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.3830	0.3830	3.0000e-005	0.0000	0.3837
<b>Total</b>	<b>0.0208</b>	<b>2.5300e-003</b>	<b>2.7500e-003</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.3830</b>	<b>0.3830</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.3837</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.7 Architectural Coating - 2020**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.4000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1734	0.1734	0.0000	0.0000	0.1735
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.1734</b>	<b>0.1734</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1735</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	2.5300e-003	2.7500e-003	0.0000		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	0.3830	0.3830	3.0000e-005	0.0000	0.3837
<b>Total</b>	<b>0.0208</b>	<b>2.5300e-003</b>	<b>2.7500e-003</b>	<b>0.0000</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>		<b>1.7000e-004</b>	<b>1.7000e-004</b>	<b>0.0000</b>	<b>0.3830</b>	<b>0.3830</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.3837</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**3.7 Architectural Coating - 2020**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	6.4000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1734	0.1734	0.0000	0.0000	0.1735
<b>Total</b>	<b>8.0000e-005</b>	<b>6.0000e-005</b>	<b>6.4000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>0.0000</b>	<b>2.0000e-004</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>5.0000e-005</b>	<b>0.0000</b>	<b>0.1734</b>	<b>0.1734</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.1735</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Silver Creek Mixed-Use Project - Santa Clara County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1414	0.5874	1.6504	5.1300e-003	0.4458	5.1500e-003	0.4509	0.1193	4.8300e-003	0.1242	0.0000	469.2741	469.2741	0.0170	0.0000	469.7001
Unmitigated	0.1414	0.5874	1.6504	5.1300e-003	0.4458	5.1500e-003	0.4509	0.1193	4.8300e-003	0.1242	0.0000	469.2741	469.2741	0.0170	0.0000	469.7001

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	511.36	511.36	511.36	1,181,041	1,181,041
Enclosed Parking with Elevator	0.00	0.00	0.00		
Junior High School	11.04	0.00	0.00	17,724	17,724
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
<b>Total</b>	<b>522.40</b>	<b>511.36</b>	<b>511.36</b>	<b>1,198,765</b>	<b>1,198,765</b>

4.3 Trip Type Information

Silver Creek Mixed-Use Project - Santa Clara County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Junior High School	9.50	7.30	7.30	72.80	22.20	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior High School	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Enclosed Parking with Elevator	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Other Asphalt Surfaces	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Apartments Mid Rise	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Silver Creek Mixed-Use Project - Santa Clara County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	133.2577	133.2577	6.0300e-003	1.2500e-003	133.7798
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	133.2577	133.2577	6.0300e-003	1.2500e-003	133.7798
NaturalGas Mitigated	4.4300e-003	0.0381	0.0177	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8342	43.8342	8.4000e-004	8.0000e-004	44.0947
NaturalGas Unmitigated	4.4300e-003	0.0381	0.0177	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.8342	43.8342	8.4000e-004	8.0000e-004	44.0947

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	749155	4.0400e-003	0.0345	0.0147	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003	0.0000	39.9777	39.9777	7.7000e-004	7.3000e-004	40.2153
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	72267	3.9000e-004	3.5400e-003	2.9800e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8564	3.8564	7.0000e-005	7.0000e-005	3.8794
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.4300e-003</b>	<b>0.0381</b>	<b>0.0177</b>	<b>2.4000e-004</b>		<b>3.0600e-003</b>	<b>3.0600e-003</b>		<b>3.0600e-003</b>	<b>3.0600e-003</b>	<b>0.0000</b>	<b>43.8342</b>	<b>43.8342</b>	<b>8.4000e-004</b>	<b>8.0000e-004</b>	<b>44.0947</b>



Silver Creek Mixed-Use Project - Santa Clara County, Annual

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	749155	4.0400e-003	0.0345	0.0147	2.2000e-004		2.7900e-003	2.7900e-003		2.7900e-003	2.7900e-003	0.0000	39.9777	39.9777	7.7000e-004	7.3000e-004	40.2153
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Junior High School	72267	3.9000e-004	3.5400e-003	2.9800e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004	0.0000	3.8564	3.8564	7.0000e-005	7.0000e-005	3.8794
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>4.4300e-003</b>	<b>0.0381</b>	<b>0.0177</b>	<b>2.4000e-004</b>		<b>3.0600e-003</b>	<b>3.0600e-003</b>		<b>3.0600e-003</b>	<b>3.0600e-003</b>	<b>0.0000</b>	<b>43.8342</b>	<b>43.8342</b>	<b>8.4000e-004</b>	<b>8.0000e-004</b>	<b>44.0947</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	298535	86.8471	3.9300e-003	8.1000e-004	87.1874
Enclosed Parking with Elevator	134800	39.2149	1.7700e-003	3.7000e-004	39.3685
Junior High School	21567	6.2741	2.8000e-004	6.0000e-005	6.2987
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	3168	0.9216	4.0000e-005	1.0000e-005	0.9252
<b>Total</b>		<b>133.2577</b>	<b>6.0200e-003</b>	<b>1.2500e-003</b>	<b>133.7798</b>

Silver Creek Mixed-Use Project - Santa Clara County, 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	298535	86.8471	3.9300e-003	8.1000e-004	87.1874
Enclosed Parking with Elevator	134800	39.2149	1.7700e-003	3.7000e-004	39.3685
Junior High School	21567	6.2741	2.8000e-004	6.0000e-005	6.2987
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	3168	0.9216	4.0000e-005	1.0000e-005	0.9252
<b>Total</b>		<b>133.2577</b>	<b>6.0200e-003</b>	<b>1.2500e-003</b>	<b>133.7798</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Silver Creek Mixed-Use Project - Santa Clara County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4741	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693
Unmitigated	0.4741	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0682					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3845					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0214	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693
<b>Total</b>	<b>0.4741</b>	<b>8.1100e-003</b>	<b>0.7010</b>	<b>4.0000e-005</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>1.1414</b>	<b>1.1414</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>1.1693</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0682					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3845					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0214	8.1100e-003	0.7010	4.0000e-005		3.8500e-003	3.8500e-003		3.8500e-003	3.8500e-003	0.0000	1.1414	1.1414	1.1200e-003	0.0000	1.1693
<b>Total</b>	<b>0.4741</b>	<b>8.1100e-003</b>	<b>0.7010</b>	<b>4.0000e-005</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>		<b>3.8500e-003</b>	<b>3.8500e-003</b>	<b>0.0000</b>	<b>1.1414</b>	<b>1.1414</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>1.1693</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Silver Creek Mixed-Use Project - Santa Clara County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15.8777	0.2028	4.9000e-003	22.4095
Unmitigated	15.8777	0.2028	4.9000e-003	22.4095

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.12448 / 3.86108	15.5150	0.2002	4.8400e-003	21.9616
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	0.0804219 / 0.206799	0.3627	2.6400e-003	7.0000e-005	0.4479
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>15.8777</b>	<b>0.2028</b>	<b>4.9100e-003</b>	<b>22.4095</b>

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**7.2 Water by Land Use**

**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	6.12448 / 3.86108	15.5150	0.2002	4.8400e-003	21.9616
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Junior High School	0.0804219 / 0.206799	0.3627	2.6400e-003	7.0000e-005	0.4479
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>15.8777</b>	<b>0.2028</b>	<b>4.9100e-003</b>	<b>22.4095</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Silver Creek Mixed-Use Project - Santa Clara County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	9.8065	0.5796	0.0000	24.2952
Unmitigated	9.8065	0.5796	0.0000	24.2952

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	43.24	8.7773	0.5187	0.0000	21.7455
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Junior High School	5.07	1.0292	0.0608	0.0000	2.5497
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.8065</b>	<b>0.5796</b>	<b>0.0000</b>	<b>24.2952</b>



Silver Creek Mixed-Use Project - Santa Clara County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	43.24	8.7773	0.5187	0.0000	21.7455
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Junior High School	5.07	1.0292	0.0608	0.0000	2.5497
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>9.8065</b>	<b>0.5796</b>	<b>0.0000</b>	<b>24.2952</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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Silver Creek Mixed-Use Project - Santa Clara County, Annual

**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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# Appendix B

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Bay Area Air Quality Management District Multiplier Tools

## How to Use the Distance Adjustment Multiplier Tool

**This distance multiplier tool refines the screening values for cancer risk and PM2.5 concentrations found in the District's Stationary Source Screening Analysis. It adjusts the risk and hazard impacts that can be expected with facility emissions based on the distance from the facility to the receptor.**

1. Obtain the facility diesel IC engine(s) cancer risk and/or PM2.5 concentration from the District's Stationary Source Screening Analysis. If the distance from the facility to the receptor is less than 25 meters, the distance adjustment multiplier table cannot be used and an air dispersion modeling analysis using site-specific meteorological data is required.
2. Determine the shortest distance from each diesel IC engine to the nearest receptor. Select the shortest distance to receptor for each diesel IC engine.
3. In the table below, enter the cancer risk and/or PM2.5 concentration found in step 1 for the diesel IC engine in the row which shortest distance to the receptor falls between two distance values, select the multiplier corresponding to the smaller distance. Multiply the cancer risk or the adjusted PM2.5 concentration for the diesel IC engine by the multiplier to obtain the adjusted cancer risk or PM2.5 concentration.

**Note:** This distance adjustment multiplier may be used only for the screening level health risk values indicated in the District's Stationary Source Screening Analysis from an HRA if an HRA for the facility was conducted.

**Note:** This distance adjustment multiplier may also be used to adjust the screening values for chronic hazard index found in the District's Stationary Source Screening Analysis.

Distance (meters)	Distance (feet)	Distance Adjustment Multiplier	Enter Cancer Risk Estimate
25	82	0.85	
30	98.4	0.73	
35	115	0.64	
40	131	0.58	
50	164	0.5	
60	197	0.41	
70	230	0.31	
80	262	0.28	
90	295	0.25	
100	328	0.22	0.44
110	361	0.18	
120	394	0.16	
130	426	0.15	

**For Diesel Internal Combustion (IC) Engines**

Stationary Source Screening Analysis Tool for permitted facilities which contain only diesel IC engines, to represent farther distances from the source of emissions.

Analysis tool only for facilities where the source is listed as "generator." If the distance to the nearest receptor is specific information is needed to refine the cancer risk, chronic hazard index or PM2.5 estimates.

found.

aligns with the shortest distance from each diesel IC engine to the nearest receptor (found in step 2). If the For distances beyond 280 meters, use the multiplier 0.04. The resulting product is the adjusted cancer risk in a

Stationary Source Screening Analysis tool for diesel IC engines. This distance multiplier tool may not be used to adjust values

of the Stationary Source Screening Analysis Tool for facilities with only diesel IC engines.

Adjusted Cancer Risk Estimate	Enter PM2.5 Concentration	Adjusted PM2.5 Concentration
0		0
0		0
0		0
0		0
0		0
0		0
0		0
0		0
0		0
0		0
0.0968	0.00045968	0.00010113
0		0
0		0
0		0

140	459	0.14	
150	492	0.12	
160	525	0.1	
180	590	0.09	
200	656	0.08	
220	722	0.07	
240	787	0.06	
260	853	0.05	
280	918	0.04	



## How to Use the Distance Adjustment Multiplier Tool

This distance multiplier tool refines the screening values for cancer risk and chronic hazard index found in the District's expected with farther distances from the source.

1. Obtain the GDF cancer risk and/or chronic hazard index from the District's Stationary Source Screening Analysis tool for facility. If the distance adjustment multiplier table cannot be used and an air dispersion modeling analysis using site-specific information is required, the distance adjustment multiplier table cannot be used and an air dispersion modeling analysis using site-specific information is required.
2. Determine the shortest distance from the GDF to the nearest receptor.
3. In the table below, enter the cancer risk and/or chronic hazard index found in step 1 for the GDF in the row which aligns with the receptor falls between two distance values, select the multiplier corresponding to the smaller distance. For distances beyond the table, use the multiplier for the last distance value. For distances beyond the table, use the multiplier for the last distance value.

**Note:** These distance adjustment multipliers may be used only for the screening level health risk values indicated in the District's screening level health risk values indicated in the District's screening level health risk values indicated in the District's may not be used to adjust values from an HRA if an HRA for the facility was conducted.

Distance meters	Distance feet	Distance adjustment multiplier	Enter Cancer Risk
20	66	1.000	
25	82	0.728	
30	98	0.559	
35	115	0.445	
40	131	0.365	
45	148	0.305	
50	164	0.260	
55	180	0.225	
60	197	0.197	
65	213	0.174	
70	230	0.155	
75	246	0.139	
80	262	0.126	
85	279	0.114	





90	295	0.104	
95	312	0.096	
100	328	0.088	
105	344	0.082	
110	361	0.076	
115	377	0.071	
120	394	0.066	
125	410	0.062	
130	426	0.058	
135	443	0.055	
140	459	0.052	
145	476	0.049	
150	492	0.046	
155	508	0.044	
160	525	0.042	
165	541	0.040	
170	558	0.038	
175	574	0.036	
180	590	0.034	
185	607	0.033	
190	623	0.031	
195	640	0.030	
200	656	0.029	
205	672	0.028	
210	689	0.027	
215	705	0.026	
220	722	0.025	
225	738	0.024	
230	754	0.023	
235	771	0.022	
240	787	0.022	
245	804	0.021	
250	820	0.020	
255	836	0.020	



260	853	0.019	
265	869	0.018	
270	886	0.018	
275	902	0.017	
280	918	0.017	
285	935	0.016	
290	951	0.016	9.614
295	968	0.015	
300	984	0.015	

0		0
0		0
0		0
0		0
0		0
0		0
0.152060568	0.016	0.000253065
0		0
0		0

# Appendix C

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Health Risk Assessment Mitigation Calculations

**Mitigation of DPM from Alum Rock Ave. at Charter School**

Calculated Individual Source Risk      1.08E-05  
 PM concentration                      0.13

Time children exposed to outdoor air at school      1.2 hours      USEPA Exposure Factors Handbook  
 Time children exposed to indoor air at school      5.8 hours      USEPA Exposure Factors Handbook

	Proportion of 24 hours	Filter efficiency	Adjusted Risk	Adjusted PM
exposed to outdoor air	0.050	0%	5.41E-07	6.50E-03
exposed to indoor air	0.242	90%	2.61E-07	3.14E-03
<i>Total Mitigated Individual Source Risk:</i>			8.02E-07	9.64E-03
			1.00E-05	0.3

## Time Spent Indoors

### Time Spent Indoors Total

Age Group	Mean (min/day)
3 to 6 years	1278
6 to 11 years	1244
11 to 16 years	1260
Average	1260.667
Hours Per Day	<b>21.01111</b>

### Time Spent Indoors at Residence

Age Group	Mean (min/day)
3 to 6 years	957
6 to 11 years	893
11 to 16 years	889
Average	913
Hours Per Day	<b>15.21667</b>

### Time Spen

5.794444

\*Assume al

### Time Spent Outdoors\*

Hours Per Day **1.205556**

\*assume a 7 hour school day and the rest of the day spent outdoors



**It Indoors at School\***

It indoor time not at home at school