Final Environmental Impact Report

for the

Quarry Row Subdivision Project

(SCH #2017032029)

Prepared for

City of Rocklin

Prepared by

Adrienne L. Graham, AICP

March 2020

Final
Environmental Impact Report

Quarry Row Subdivision Project

SCH #2017032029

Prepared for:

City of Rocklin

Prepared by:

Adrienne L. Graham, AICP

March 2020

TABLE OF CONTENTS

TABLE OF CONTENTS

APPENDICES (On Disk Only)

List of Tables

List of Figures

1. INTRODUCTION

INTRODUCTION

This Final Environmental Impact Report (FEIR) contains comments received during the public review period on the Draft Environmental Impact Report (Draft EIR or DEIR) for the proposed Quarry Row Subdivision project (Proposed Project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA).

BACKGROUND

This Environmental Impact Report (EIR) is an informational document intended to disclose to the decision-makers and the public the environmental consequences of approving the Proposed Project. This document and the Draft EIR together constitute the Final EIR that will be considered by the City of Rocklin. The Draft EIR was circulated for a 45-day public review period and was also submitted to the State Clearinghouse, which provided State agencies with a 45-day public review period.

All written comments received during the Draft EIR public review period (December 14, 2017, through January 29, 2018) are contained in this Final EIR, along with responses to those comments.

CHANGES TO THE PROJECT AND DRAFT EIR

Since the Draft EIR was prepared, the project applicant has proposed to increase the number of dwelling units from 64 to 74, of which, 7 units would be affordable. Chapter 2 of this Final EIR explains those changes in more detail, and provides revisions to the Draft EIR to reflect the proposed changes to the project. As discussed in more detail in Chapter 2, the proposed revisions would not alter the conclusions of the Draft EIR and/or result in new or substantially more severe impacts on the environment.

COMMENTS AND RESPONSES

Two comment letters were received during the comment period for the Draft EIR:

- Central Valley Regional Water Quality Control Board (CVRWQCB).
- Governor's Office of Planning and Research

Comments raised in these letters are provided in Chapter 3 along with responses to those comments. Each comment is presented with brackets indicating how the letter has been divided into individual comments. Each comment is given a binomial with the letter number appearing first, followed by the comment number. For example, comments are numbered 1-1, 1-2, 1-3, and so on. Immediately following the letter are responses, each with binomials that correspond to the bracketed comments.

The focus of the response to comments is on the disposition of significant environmental issues raised in the comments, as specified by Section 15088(c) of the CEQA Guidelines. Some comments on the DEIR do not pertain to physical environmental issues. Responses to such comments, though not required under CEQA, are included to provide additional information. The phrase "comment noted" is used when the EIR authors wish to acknowledge a comment that does not directly pertain to the Proposed Project or environmental issues analyzed in the EIR, does not

ask a question about the EIR, or does not challenge an element of, or conclusion of, the EIR. The intent is to simply recognize the comment.

2. CHANGES TO THE PROJECT AND DRAFT EIR

This chapter presents all of the revisions made to the Draft EIR as a result of changes to the Proposed Project (discussed in more detail, below), as well as minor revisions initiated by City staff based on their on-going review. There are several modifications to impact discussions and mitigation measures, but none of these are substantial enough to alter the findings of significance and/or to result in a substantial increase in the severity of an impact.

PROPOSED CHANGES TO THE PROJECT DESCRIBED IN THE DRAFT EIR

Since the Draft EIR was circulated, the project applicant has amended the application to provide for 74 dwelling units (du), rather than 64 units. The project boundaries would not change.

In order to accommodate the additional units, the average lot size would decrease from 2,829 square feet to 2,360 square feet. The layout of the project site would be very similar, with the same access points and roadway alignment. The non-development parcels would be reconfigured slightly.

The applicant is also proposing that seven of the units be set aside for low-income home buyers (those who have a household income of 80% or less of the Area Median Income (AMI)). The remaining 67 units would be sold at market rates.

The architectural style and height of the homes would not change.

One additional change is that based on more detailed engineering, the applicant has determined that approximately 1,000 cubic yards of fill would be imported to the site. The Draft EIR had assumed that grading of the site would be balanced so that no importation or exportation of fill was needed.

Specific changes to the Draft EIR Project Description and other chapters are provided below, followed by a discussion of the extent to which the proposed changes would affect the environmental analysis.

CHANGES TO THE TEXT OF THE DRAFT EIR

Changes to the Draft EIR text are provided below. Added text is underlined and deleted text is struck through. Text changes are presented in the page order in which they appear in the Draft EIR. Where modifications were made to mitigation measures in the Draft EIR, the Mitigation Monitoring and Reporting Program (MMRP) in Chapter 4 contains the mitigation measures as revised.

NOTE: Added text is underlined and deleted text is struck through.

1. INTRODUCTION

Page 1-1 The first and second sentence in the fourth paragraph are revised to read:

> The Proposed Project would develop <u>74</u> ~~64~~ single-family homes on the project site. The project proposes a General Plan Amendment to re-designate the site to Medium High Density Residential (MHDR) and to rezone the site to Planned Development, ~~9~~ <u>10.5</u> units per acre (PD-~~9~~ <u>10.5</u>).

Page 1-8 The fifth full sentence is revised to read:

Development of the Proposed Project would result in ~~64~~ 74 dwelling units, a potential reduction of ~~50~~ 40 percent over the current land use designations.

Page 1-8 The fourth sentence in item (9) is revised to read:

The Proposed Project would develop ~~64~~ 74 units on 7.4 acres, which is a density of approximately ~~8.7~~ 10.3 units per acre, which is on the lower end of the allowed density for the proposed MHDR designation, and well below the allowable densities for the existing designations.

Page 1-9 The last sentence in the first paragraph is revised to read:

The Proposed Project would be expected to generate approximately ~~19~~ 22 K-6 students, ~~6~~ 7 middle school students and ~~13~~ 14 high school students, for a total of ~~38~~ 43 students.

Page 1-9 Table 1-1 is revised as shown:

Revised
Table 1-1
Quarry Row Student Generation

Grade Level	Student Generation Rates			Project Students
	3 bedroom	4 bedroom	Average Rate	
K-6	0.245	0.342	0.294	~~18.8~~ 21.8
7-8	0.079	0.114	0.097	~~6.2~~ 7.2
9-12	0.158	0.232	0.195	~~12.5~~ 14.4
Total K-12	0.482	0.688	0.585	~~37.5~~ 43.4

Source: Economic & Planning Systems, *Final Report, Facilities Master Plan 2014 Update,* prepared for Rocklin Unified School District, June 2014, Table 15.

Page 1-9 The third sentence in the second paragraph is revised to read:

In 2015/16, Rocklin Elementary had an enrollment of 534 students, so it would have capacity to accommodate an additional ~~19~~ 22 students.

2. SUMMARY

Page 2-1 The first and second sentence in the third paragraph are revised to read:

The Proposed Project would develop ~~64~~ 74 single-family homes on the project site. The project site would be re-designated Medium High Density Residential (MHDR) and re-zoned Planned Development, ~~9~~ 10.5 units per acre (PD-~~9~~ 10.5).

Page 2-2 The first sentence of the paragraph on **Aesthetics** is revised to read:

The alteration of the project site through the demolition of one commercial structure and

the construction of ~~64~~ 74 single family homes would not introduce incompatible elements in an area that is currently developed with residential, commercial and light industrial uses.

Page 2-4 The first sentence of the paragraph on **Noise** is revised to read:

Development of the Proposed Project would result in an increase in short-term noise impacts from construction activities, but through compliance with the City's standard conditions, the impact would be less than significant. The development and occupation of a ~~64~~ 74 lot single-family residential subdivision is not anticipated to have significant long-term operational noise impacts.

Page 2-5 The first sentence of the paragraph on **Transportation** is revised to read:

The Proposed Project is anticipated to cause increases in traffic because a partly developed site would become further developed with a ~~64~~ 74 lot single family residential subdivision whose residents would generate automobile trips.

Page 2-9 Mitigation Measure 4.1-2 is revised to read:

4.1-2 *Prior to issuance of a ~~of~~ demolition permit for ~~of~~ the Pleasure Hall, the building's use and history shall be documented in a Historic American Building Survey (HABS), including photographs, plans, drawings, interviews and written documentation, to preserve a definitive history of the building and its uses. The HABS report shall be provided to the appropriate depository or depositories (e.g., the Rocklin Historical Society).*

3. PROJECT DESCRIPTION

Page 3-5 The following bullet is added after the last bullet on the page:

- Contribute toward the City's efforts to provide affordable housing to low-income households, and to meet the City's Regional Housing Needs Allocation requirements.

Page 3-5 The first two sentences in the paragraph under **PROJECT ELEMENTS** is revised to read:

The Quarry Row Subdivision project (Proposed Project) consists of the demolition of an existing commercial structure and the development of a ~~64~~ 74-unit, single-family residential subdivision. Minimum lot sizes would be ~~35~~ 28 feet by ~~70~~ 73 feet for a total minimum lot area of ~~2,450~~ 2,044 square feet, with the maximum lot size being ~~5,304~~ 4,262 square feet, and an average lot size of ~~2,829~~ 2,360 square feet.

Page 3-5 The fifth paragraph under **PROJECT ELEMENTS** is revised to read:

The project proposes to change the General Plan land use designation to Medium High Density Residential (MHDR) and the zoning designation to Planned Development Residential, ~~9~~ 10.5 dwelling units per acre (PD-~~9~~ 10.5).

Page 3-5 The following sentence is added after the fifth paragraph under **PROJECT ELEMENTS**:

Approximately 9 percent of the dwelling units (seven units) will be set aside for low-

income buyers, defined as those with a household income of 80% of the area median income (AMI).

Page 3-6 Figure 3-4, Site Plan, is replaced by the figure on the following page.

Page 3-7 The second paragraph under **Construction and Phasing** is revised to read:

~~The site is anticipated to balance with respect to cut and fill grading operations~~. Based on the preliminary grading plan, the Proposed Project would result in 5,962 cubic yards (cy) of cut and 8,206 cubic yards of fill, for a net 2,244 cy of fill. The actual amount would be less than this, because the cut amount does not include trenching, footings or basins. The total anticipated need for imported fill is estimated to be 1,000 cy.

Page 3-8 The fourth bullet is revised to read:

- Rezone from Retail Business (C-2) to Planned Development Residential, ~~9~~ 10.5 dwelling units per acre (PD-~~9~~10.5);
- Tentative Subdivision Map to subdivide the six existing parcels into ~~64~~ 74 lots;

4.0 INTRODUCTION TO THE ANALYSIS

No changes.

4.1 CULTURAL RESOURCES

Page 4.1-11 In order to clarify the timing of implementation, Mitigation Measure 4.1-2 is revised to read:

4.1-2 *Prior to issuance of a ~~of~~ demolition permit for ~~of~~ the Pleasure Hall, the building's use and history shall be documented in a Historic American Building Survey (HABS), including photographs, plans, drawings, interviews and written documentation, to preserve a definitive history of the building and its uses. The HABS report shall be provided to the appropriate depository or depositories (e.g., the Rocklin Historical Society).*

5. ALTERNATIVES

Page 5-6 The first sentence under Impacts Identified as Being More Severe than the Proposed Project is revised to read:

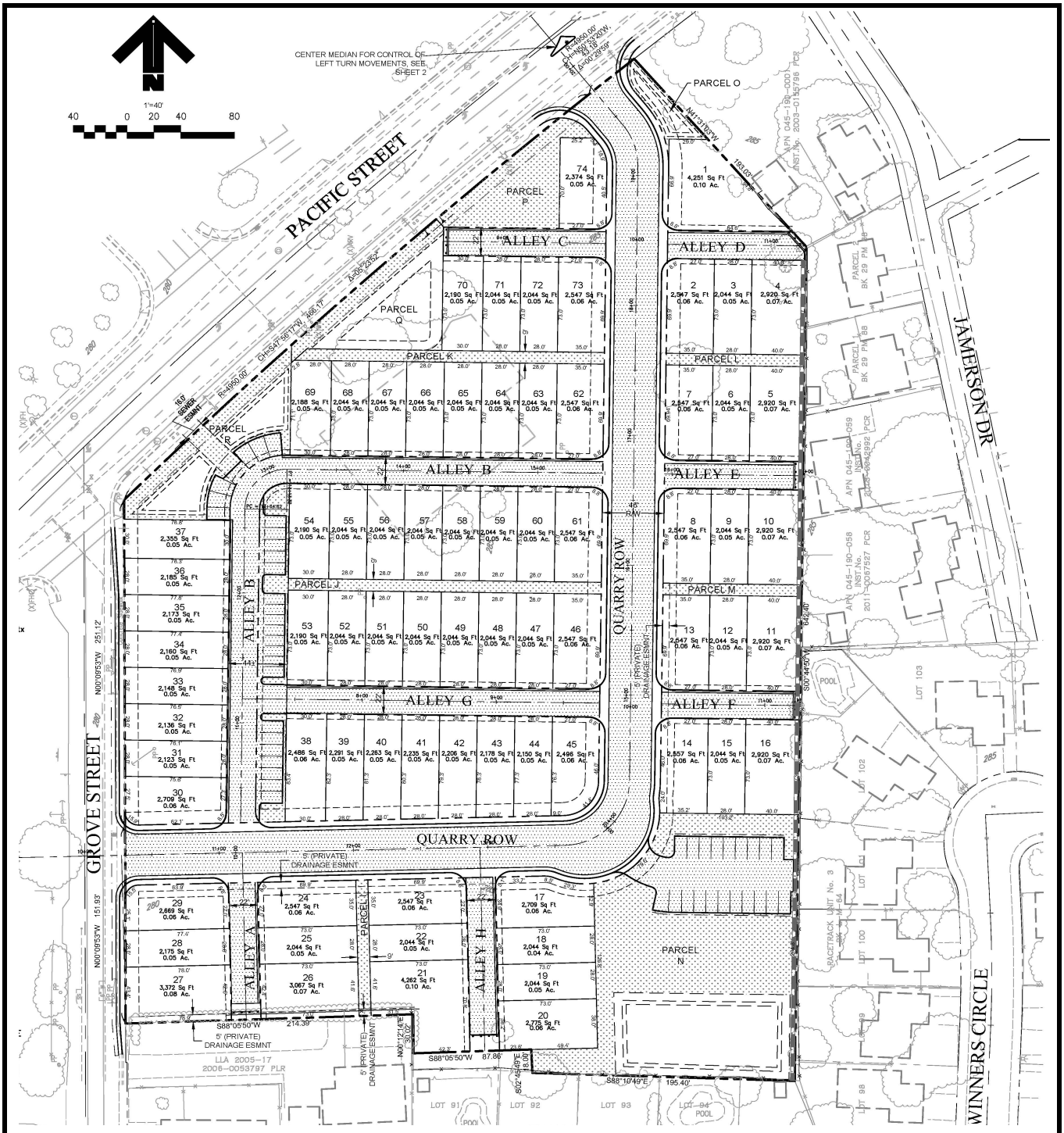
Alternative 2 would generate almost ~~four~~ three times as many vehicle trips as the Proposed Project.

Page 5-7 The first full sentence is revised to read:

The Proposed Project is estimated to generate ~~953.35~~ 902.15 $MTCO_2e$ per year (see ~~Initial Study page 40~~ FEIR Appendix A, Table 5), which would be about ~~13~~ 18 percent below the screening threshold.

6. CEQA CONSIDERATIONS

Page 6-2 The last sentence is revised to read:



SOURCE: TLA Engineering & Planning, Inc.. September 2020.

Revised
Figure 3-4
Site Plan

The Proposed Project would result in ~~7.62~~ 5.09 pounds per day of ROG and ~~4.77~~ 3.06 pounds per day of NOx, which would be below the cumulative thresholds (see ~~Initial Study page 19~~ FEIR Appendix A, Table 4).

Page 6-6 The third sentence under **Population and Housing** is revised to read:

The Proposed Project would construct ~~64~~ 74 units, a small fraction of the units anticipated under the City's General Plan.

7. REFERENCES

Page 7-1 The following references are added:

KD Anderson & Associates, Inc., *Quarry Row Project Revised Air Quality and Greenhouse Gas Analysis,* July 22, 2019,

KD Anderson & Associates, Inc., *Quarry Row Subdivision: Traffic Study Update*, July 24, 2019.

ENVIRONMENTAL ANALYSIS

If significant new information is added to an EIR after public review, the lead agency is required to recirculate the revised document (CEQA Guidelines Section 15088.5). Significant new information includes, for example, a new significant environmental impact or a substantial increase in the severity of an impact. New information is not considered significant unless the document is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental impact of the project or comment on a feasible mitigation measure that the proponent has declined to implement. As discussed in more detail below, the proposed changes to the Proposed Project would result only in minor revisions to the analysis provided in the Draft EIR. No new impacts or substantial increases in the severity of impacts have been identified. No new mitigation measures and/or alternatives have been proposed and/or rejected by the application. For these reasons, recirculation of the DEIR is therefore not warranted.

For those impacts that are based on the area to be graded and/or disturbed, impacts would be unchanged because the amount of disturbance would be the same. These include the loss of biological resources (Section IV of the Initial Study), damage to and/or loss of archaeological, historical and/or paleontological resources (Draft EIR Chapter 4, Cultural Resources), soil erosion and landslides or similar occurrences (Items VI.a.iv, b, and c of the Initial Study), flooding and stormwater runoff, including water quality degradation, and alterations to groundwater (Section IX and Item XVIII.a and c of the Initial Study), and loss of or damage to tribal cultural resources (Section XVII of the Initial Study),

The Proposed Project as revised would have more units and residents that could be exposed to seismic and geology/soils-related risks, such as fault rupture, ground shaking and expansive soils (Initial Study Items VI.a.i-iii, c and d) and hazardous materials (Initial Study Section VIII). However, in all of these cases, the application of laws and regulations would ensure that these risks would continue to be less than significant.

The importation of approximately 1,000 cubic yards of fill would occur during construction. The associated effects would be consistent with typical construction activities and would be temporary. There would be a relatively small increase in truck trips associated with the additional fill, which would increase air and greenhouse gas (GHG) emissions. As discussed in

more detail below, project construction emissions would be well below the applicable GHG and air quality thresholds, so these impacts would remain less than significant.

Impact areas where the proposed increase in the number of units would affect the environmental analysis are discussed below. As indicated, none of these impacts would be significant under either the project analyzed in the Draft EIR or as proposed to be revised.

Aesthetics (Initial Study Section I): The visual impacts described on pages 11 and 12 of the Initial Study would be unchanged because the same area would be graded, the homes would be of similar size, and they would be subject to the same height maximums and lighting requirements. The architectural character would be the same as the 64-unit project. For these reasons, the addition of 10 homes to the Proposed Project would not substantially alter the visual effects of the project.

Air Quality (Initial Study Section III): Air emissions from the Proposed Project would differ slightly from those described in the Initial Study, although both construction and operation emissions would be below the applicable thresholds. A revised analysis of air emissions was prepared in July 2019 to address the proposed increase in units. The 2019 study, which is included in Appendix A of this Final EIR, found that both construction and operational emissions (under both existing and cumulative conditions) would be well below the applicable thresholds. The applicable thresholds for construction emissions are 82 pounds per day (ppd) each of reactive organic gases (ROG), nitrogen oxides (NO_x) and inhalable particular matter (PM_{10}). The construction of the Proposed Project with the increased number of units would be 66.99 ppd of ROG, 42.47 ppd of NO_x and 20.41 ppd of PM_{10}, all of which are below 82 ppd. The applicable thresholds for operational emissions are 55 ppd of ROG or NO_x and 82 ppd of PM_{10}. The revised project emissions are estimated to be 5.09 ppd of ROG, 3.32 of NO_x and 4.73 of PM_{10}. Cumulative project emissions would be similar.[1, 2] Because the project emission levels would continue to be below the applicable standards, the impact would remain less than significant.

Greenhouse Gas Emissions (Initial Study Section VII): The change in the number of units would alter the estimated emissions of greenhouse gasses, but the levels would remain below the applicable threshold of 1,100 metric tons of carbon dioxide (CO_2) equivalent units per year ($MTCO_2e$/year). A revised analysis was prepared in 2019 for the Proposed Project as revised. The study estimates that the Proposed Project would generate approximately 902.5 $MTCO_2e$/year.[2,3] Because greenhouse gas emissions would continue to be below 1,100 $MTCO_2e$/year, the impact would remain less than significant.

Land Use (Initial Study Section X): As with the project analyzed in the Draft EIR, the project as currently proposed would require a General Plan Amendment to revise the land use designation on the site and a revision to the zoning. No other inconsistencies with the City's General Plan have been identified. Further, the increase in units would better aid the City in achieving its affordable housing goals and policies (see for example, Housing Element Policies 2.3 and 3.4, and Land Use Policies LU-21 and LU-72) than the 64-unit project, because seven homes (approximately 9 percent) would be set aside for low income home buyers. The provision of

1 KD Anderson & Associates, Inc., *Quarry Road Project Revised Air Quality and Greenhouse Gas Analysis*, July 22, 2019, Tables 1, 2 and 3. Note that this study assumed 76 units, rather than the 74 units that are currently proposed. Therefore, the emissions estimates are slightly overstated and can be considered conservative.

2 In several cases, the emissions levels estimated in the 2019 study are lower than those reported in the 2017 report and the Initial Study, even though the number of units have increased. This is because the 2019 study used the most recent available model, which has changed since the 2017 analysis was prepared (see pages 1 and 2 of the study in Appendix A).

3 KD Anderson & Associates, Inc., *Quarry Road Project Revised Air Quality and Greenhouse Gas Analysis*, July 22, 2019, Table 5.

these units would in particular promote Policy 3.4 of the Housing Element, which states:

> Continue to work with developers requesting General Plan Amendments converting nonresidential designation to residential uses or from a higher density residential category to a lower density residential category to incorporate affordable housing as a component of the overall development. As an objective, target up to ten percent of the units as affordable, depending on the level of affordability or other amenities provided. Pursue the inclusion of extremely low income units in the negotiated target number of affordable units.

In addition to setting aside approximately nine percent of project units for low-income homebuyers, the Proposed Project would convert land designated mixed use, which allows for non-residential uses, to residential-only land.

Noise (Initial Study Section XII): Construction noise impacts would not change because daily construction activities and proximity to sensitive receptors would be the same whether 64 or 74 units are constructed. The noise study prepared for the Proposed Project assumed that 72 units would be built[4], only two fewer units than currently proposed. The increase in units would increase traffic levels somewhat (see discussion under "Traffic" below), but not enough to substantially alter the noise levels of the project. As discussed on page 54 of the Initial Study, the 2nd floors of units along Pacific Street would be exposed to noise levels that exceed City standards. The units on this segment would continue to be subject to Mitigation Measures XII-1 through -3, which would ensure that interior noise levels are within applicable standards.

Population (Initial Study Section XIII): The increase in population would be slightly higher with the additional 10 units. However, the increase would be within the growth levels assumed for the Citywide, representing approximately 0.25% of the number of anticipated units Citywide.

Public Services and Recreation (Initial Study Sections XIV and XV): Because the location of the project would be unchanged, and because new development would contribute to financing of fire and police services through taxes, the project would be adequately served even with the increase in units. The number of school children generated by the project would increase from approximately 37.5 to 43.4, for which there would be adequate capacity at local schools. For example, Rocklin Elementary School had an enrollment of 534 students in 2015/16, and has a capacity of 605 students. The project with 74 units would result in 22 new K-6 students (compared to 19 with 64 units), which would be within the capacity of Rocklin Elementary School as discussed in the Initial Study. The middle and high schools also have enough capacity to accommodate the seven additional 7th and 8th graders and 14 high school students that would result from development of 74 dwelling units. The project would not substantially increase the use of or demand for recreation facilities, and would contribute park fees based on the number of units to be constructed. Therefore, there would not be a substantial impact on parks and recreation with the increased number of units.

Transportation/Traffic (Initial Study Section XVI): A revised traffic study was prepared to address the increase in the number of units for the Proposed Project. The new traffic study is provided in Appendix B of this Final EIR. The traffic study assumed that there would be 76 units, rather than the 74 units that are currently proposed. Therefore, the findings of the study can be considered conservative. The study finds that there would be 115 more daily trips, with 9 more trips in the a.m. peak hour and 12 more trips in the p.m. peak hour.[5] All study intersections would operate within the City's level of service (LOS) standards of LOS C or better with the

4 j.c.brennan & associates, *Environmental Noise Assessment, Coker Property Residential,* November 17, 2015, page 1.

5 KD Anderson & Associates, Inc., *Quarry Road Subdivision Project: Traffic Study Update*, July 24, 2019, page 1 and Table 1.

addition of project traffic. Therefore, the impact on traffic would continue to be less than significant.

Utilities (Initial Study Section XVIII): As discussed in Initial Study Section XVIII, there is adequate wastewater treatment capacity, water supply and landfill capacity to serve the 64 dwelling units originally proposed for the project. The service areas for these facilities are regional in nature, serving development beyond the City of Rocklin. The 74 units now proposed would not require substantially more capacity than 64 units, so there would be no change in the ability of utility service providers to accommodate the additional units.

3. COMMENTS AND RESPONSES

CALIFORNIA Water Boards

Central Valley Regional Water Quality Control Board

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

18 January 2018

David Mohlenbrok
City of Rocklin
4081 Alvis Court
Rocklin, CA 95677

CERTIFIED MAIL
91 7199 9991 7036 7026 4108

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, QUARRY ROW SUBDIVISION PROJECT, SCH# 2017032029, PLACER COUNTY

Pursuant to the State Clearinghouse's 14 December 2017 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environment Impact Report* for the Quarry Row Subdivision Project, located in Placer County.

1-1

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

1-2

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments

only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/.

1-2 (cont.)

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Policy is available on page IV-15.01 at: http://www.waterboards.ca.gov/centralvalleywater_issues/basin_plans/sacsjr.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

1-3

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

1-4

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

1-4 (cont.)

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

For more information on the Caltrans Phase I MS4 Permit, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/caltrans.shtml.

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

1-5

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

1-6

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure

1-7

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

1-7 (cont.)

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance (i.e., discharge of dredge or fill material) of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

1-8

Waste Discharge Requirements (WDRs)

Discharges to Waters of the State

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

Land Disposal of Dredge Material

If the project will involve dredging, Water Quality Certification for the dredging activity and Waste Discharge Requirements for the land disposal may be needed.

1-9

Local Agency Oversite

Pursuant to the State Water Board's Onsite Wastewater Treatment Systems Policy (OWTS Policy), the regulation of septic tank and leach field systems may be regulated under the local agency's management program in lieu of WDRs. A county environmental health department may permit septic tank and leach field systems designed for less than 10,000 gpd. For more information on septic system regulations, visit the Central Valley Water Board's website at: *http://www.waterboards.ca.gov/centralvalley/water_issues/owts/sb_owts_policy.pdf*

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

1-10

Regulatory Compliance for Commercially Irrigated Agriculture

If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: http://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/app_approval/index.shtml; or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 10-100 acres are currently $1,084 + $6.70/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the

1-11

Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

1-11 (cont.)

Low or Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Dewatering and Other Low Threat Discharges to Surface Waters* (Low Threat General Order) or the General Order for *Limited Threat Discharges of Treated/Untreated Groundwater from Cleanup Sites, Wastewater from Superchlorination Projects, and Other Limited Threat Wastewaters to Surface Water* (Limited Threat General Order). A complete application must be submitted to the Central Valley Water Board to obtain coverage under these General NPDES permits.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf

1-12

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2013-0073.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of the waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/help/business_help/permit3.shtml

If you have questions regarding these comments, please contact me at (916) 464-4644 or Stephanie.Tadlock@waterboards.ca.gov.

Stephanie Tadlock

Stephanie Tadlock
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

LETTER 1: STEPHANIE TADLOCK, ENVIRONMENTAL SCIENTIST, CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

Response to Comment 1-1:

The comment acknowledges the CVRWQCB's review of the document and area of purview. Comment noted.

Response to Comment 1-2:

The comment provides a summary of the Basin Plan. Comment noted.

Response to Comment 1-3:

The comment provides an overview of the antidegradation considerations for the discharge of wastewater. As discussed on page 76 of the Initial Study (Appendix A of the Draft EIR), the Proposed Project would connect to the public sewer, and project wastewater would be treated at one of the South Placer Wastewater Authority's two wastewater treatment plants. Therefore, the Proposed Project does not require an antidegradation analysis.

Response to Comment 1-4:

The Proposed Project would disturb approximately 7.4 acres, and so must obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities. As discussed on pages 46 and 47 of the Initial Study, the Proposed Project must implement a number of measures to reduce construction impacts on water quality. In addition, as part of the Construction General Permit, the Proposed Project will prepare a Stormwater Pollution Prevention Plan (SWPPP).

Response to Comment 1-5:

The comment provides information on the MS4 Permit process. The City is subject to the conditions of the MS4 Phase 2 permit, so the Proposed Project must comply with these conditions. Toward that end, the Proposed Project will incorporate best management practices (BMPs) and low impact development measures (LIDs) to minimize degradation of water quality, as discussed on page 46 of the Initial Study.

Response to Comment 1-6:

The project uses are not industrial, so the Industrial Storm Water General Permit does not apply. The Proposed Project will not discharge to waters of the State, involve dredging and/or install a septic system, so Waste Discharge Requirements (WDRs) do not apply.

Response to Comment 1-7:

As stated on page 26 of the Initial Study, there are no wetlands on the site, so Section 404 of the Clean Water Act does not apply.

Response to Comment 1-8:

As stated in Response to Comment 1-7, there are no wetlands on the site. Therefore, a

USACOE permit and Section 401 Water Quality Certification would not be required.

Response to Comment 1-9:

The Proposed Project would not discharge to Waters of the State, or involve dredging. Therefore, Waste Discharge Requirements (WDRs) would not apply.

Response to Comment 1-10:

Construction of the Proposed Project is not expected to require dewatering because no deep excavation is proposed, but if groundwater is encountered during construction, any discharge of such groundwater would comply will all City and State regulations.

Response to Comment 1-11:

The project is not agricultural, so the Regulatory Compliance for Commercially Irrigated Agriculture does not apply.

Response to Comment 1-12:

The Proposed Project would connect to a community sewer system, and would not discharge groundwater to waters of the United States. Therefore, no National Pollutant Discharge Elimination System (NPDES) permit would be required.

Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Ken Alex
Director

January 30, 2018

David Mohlenbrok
City of Rocklin
4081 Alvis Court
Rocklin, CA 95677

Subject: Quarry Row Subdivision
SCH#: 2017032029

Dear David Mohlenbrok:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 29, 2018, and the comments from the responding agency (ies) is (are) enclosed. If the comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

2-1

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2017032029
Project Title Quarry Row Subdivision
Lead Agency Rocklin, City of

Type EIR Draft EIR

Description Project would redesignate the project site Medium High Density Residential, and rezone the site Planned Development Residential (MHDR), 9 dwelling units per acre (PD-9). The project would develop 64 single family dwelling units on the project site. No off-site improvements are anticipated beyond connecting to existing roads and utility lines adjacent to the project site.

Lead Agency Contact

Name David Mohlenbrok
Agency City of Rocklin
Phone 916-625-5501 **Fax**
email
Address 4081 Alvis Court
City Rocklin **State** CA **Zip** 95677

Project Location

County Placer
City Rocklin
Region
Lat / Long
Cross Streets Pacific Street/Grove Street
Parcel No. 045-031-001 thru -004, 045-031-005
Township **Range** **Section** **Base**

Proximity to:

Highways I-80
Airports
Railways UPRR
Waterways Antelope Creek
Schools Rocklin Elementary Holy Cross
Land Use Mixed Use (MU) and High Density Residential (HDR); Retail BUsiness (C-2)

Project Issues Archaeologic-Historic; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 2; Cal Fire; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 3 N; Regional Water Quality Control Bd., Region 5 (Sacramento); Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission

Date Received 12/13/2017 **Start of Review** 12/14/2017 **End of Review** 01/29/2018

Note: Blanks in data fields result from insufficient information provided by lead agency.

LETTER 2: SCOTT MORGAN, DIRECTOR, STATE CLEARINGHOUSE, GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

Response to Comment 2-1:

The comment acknowledges that the State Clearinghouse submitted the Draft EIR to state agencies for review, and that the City has complied with the State Clearinghouse review requirements. Comment noted.

4. MITIGATION MONITORING AND REPORTING PROGRAM

4. MITIGATION MONITORING AND REPORTING PROGRAM

INTRODUCTION

This section provides the Mitigation Monitoring and Reporting Program (MMRP) for the Quarry Row Subdivision project, pursuant to Section 21081.6 of the California Public Resources Code and Section 15097 of the CEQA Guidelines, which require that public agencies adopt a reporting and monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. A MMRP is required for the proposed project because the Environmental Impact Report identified significant adverse impacts, and mitigation measures have been identified to reduce those impacts to less-than-significant levels.

The Proposed Project would develop 74 single-family homes on the project site. The project site would be re-designated Medium High Density Residential (MHDR) and re-zoned Planned Development, 10.5 units per acre (PD-10.5). Access to the Proposed Project would be provided by connections to Pacific Street and Grove Street.

Adoption of the MMRP must occur prior to, or concurrently with, adoption of the proposed project for which the program has been developed.

PURPOSE OF THE MITIGATION MONITORING AND REPORTING PROGRAM

The purpose of the MMRP is to:

- Ensure that mitigation measures are implemented;
- Provide feedback to agency staff and decision makers about the effectiveness of mitigation measures;
- Provide learning opportunities for improving mitigation measures on future projects; and
- Identify the need for enforcement action before irreversible environmental damage occurs.

The components of the MMRP are addressed briefly below.

Mitigation Measure: The mitigation measures are taken verbatim from Table 2-1 of the Draft EIR, and include all measures identified in the Draft EIR and the Initial Study. The numbering of the individual mitigation measures follows the numbering sequence found in the Draft EIR.

Monitoring Agency: The City of Rocklin will have ultimate and legal responsibility for implementation of all mitigation measures. This column indicates which department within the City will conduct the actual monitoring and reporting, as well as take corrective actions when a measure has not been properly implemented.

Implementation Schedule: Each action must take place during or prior to some part of project development or approval.

Monitoring Compliance Record: Provides space for the name of the City staff person who verifies compliance with the mitigation measure, the date of verification and any associated notes.

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Agency	Implementation Schedule	Monitoring Compliance Record (Name/Date)
4.1 Cultural Resources			
4.1-1(a) If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, charcoal, animal bone, bottle glass, ceramics, burned soil, structure/building remains) is made during project-related construction activities, ground disturbances in the area of the find shall be halted and a qualified professional archaeologist, the Environmental Services Manager and the Native American Heritage Commission shall be notified regarding the discovery. The archaeologist shall determine whether the resource is a historical resource or a unique archaeological resource (as defined by CEQA) and shall develop specific measures to ensure preservation of the resource or to mitigate impacts to the resource if it cannot feasibly be preserved in light of costs, logistics, technological considerations, the location of the find, and the extent to which avoidance and/or preservation of the find is consistent or inconsistent with the design and objectives of the project. Specific measures would include, but are not necessarily limited to, preservation in place, in-field documentation, archival research, subsurface testing, and excavation. The specific type of measure necessary would be determined according to evidence indicating degrees of resource integrity, spatial and temporal extent, and cultural associations, and would be developed in a manner consistent with CEQA guidelines for preserving or otherwise mitigating impacts to archaeological and cultural artifacts. (b) In the event of the accidental discovery or recognition of any human remains, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains, until compliance with the provisions of Sections 15064.5 (e)(1) and (2) of the CEQA Guidelines, as well as Public Resources Code Section 5097.98, has occurred. If any human remains are discovered, all work shall stop in the immediate vicinity of the find and the County Coroner shall be notified, according to Section 7050.5 of the California Health and Safety Code. The City's Environmental Services Manager shall also be notified. If the remains are Native American, the Coroner will notify the Native American Heritage Commission, to request the names of the most likely descendant. The descendant will then recommend to the landowner appropriate disposition of the remains	ECDD PSD	During site preparation and construction	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Agency	Implementation Schedule	Monitoring Compliance Record (Name/Date)
and any grave goods, and the landowner shall comply with the requirements of AB 2641 (2006).			
4.1-2 Prior to issuance of a demolition permit for the Pleasure Hall, the building's use and history shall be documented in a Historic American Building Survey (HABS), including photographs, plans, drawings, interviews and written documentation, to preserve a definitive history of the building and its uses. The HABS report shall be provided to the appropriate depository or depositories (e.g., the Rocklin Historical Society).	CDD	Prior to issuance of a demolition permit for the existing building	
4.1-3 If paleontological resources (e.g., fossils) are discovered during construction, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery. After cessation of excavation the contractor shall immediately contact a qualified paleontologist and the City of Rocklin Environmental Services Manager. The potential paleontological resource(s) discovered during construction shall be evaluated by the qualified paleontologist. If it is determined that the project could damage a unique paleontological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist shall develop a treatment plan in consultation with the City's Environmental Services Manager. If determined appropriate by the paleontologist, the find shall be deposited at an appropriate repository, such as Sierra College or the University of California Museum of Paleontology. The contractor shall not resume work until authorization is received from the City's Environmental Services Manager.	CDD PSD	During site preparation and construction	
4.1-4 Implement Mitigation Measure 4.1-1.	See Mitigation Measure 4.1-1.*		
4.1-5 Implement Mitigation Measure 4.1-2.	See Mitigation Measure 4.1-2.*		
4.1-6 Implement Mitigation Measure 4.1-3.	See Mitigation Measure 4.1-3.*		
*Impacts 4.1-4 through 4.1-6 address the cumulative impacts on archeological, historical and paleontological resources, respectively. The mitigation measures to address the project contribution to those cumulative impacts are the same as the mitigation measures for the project-specific impacts.			

Table 4-1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	**Monitoring Agency**	**Implementation Schedule**	**Monitoring Compliance Record (Name/Date)**
INITIAL STUDY			
IV. Biological Resources			
IV.-1(a) The applicant/developer shall attempt to time the removal of potential nesting habitat for raptors, migratory birds and bat species to avoid the nesting season (February – September 15). If tree and vegetation removal would occur during the nesting season for raptors and/or migratory birds (February-September 15), the developer and/or contractor shall hire a qualified biologist approved by the City to conduct pre-construction surveys no more than 14 days prior to initiation of demolition activities. The survey shall cover all areas of suitable nesting habitat within 500 feet of project activity and shall be valid for one construction season. Prior to the start of removal activities, documentation of the survey shall be provided to the City of Rocklin Building Department and if the survey results are negative, no further mitigation is required and necessary structure removal may proceed. If there is a break in demolition activity of more than 14 days, then subsequent surveys shall be conducted. If the survey results are positive (active nests are found), impacts shall be avoided by the establishment of appropriate buffers. The biologist shall consult with the California Department of Fish and Wildlife (CDFW) and the City to determine the size of an appropriate buffer area (CDFW guidelines recommend implementation of 500-foot buffers). Monitoring of the nest by a qualified biologist may be required if the activity has the potential to adversely affect an active nest. If demolition activities are scheduled to occur during the non-breeding season (September 16-January), a survey is not required and no further studies are necessary.	CDD PSD	Survey site within 14 days prior to beginning site preparation activities Maintain buffers as needed during site preparation and construction	
(b) Prior to removal of the existing building, a survey for bats shall be prepared by a qualified biologist. If bat roosting sites are identified within the survey area, then they shall be avoided during the nursery season (April 1st through August 31st). The bats may be evicted from the building	CDD PSD	Prior to removal of the existing building	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Agency	Implementation Schedule	Monitoring Compliance Record (Name/Date)
between September 1 and March 31, which is outside of the nursery season. Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with the CDFW, that allow the bats to exit the roosting site but prevent re-entry to the site. This would include, but not be limited to the installation of one way exclusion devices. The devices shall remain in place for a minimum of seven days and then the exclusion points and any other potential entrances shall be sealed immediately following the removal of the devices. This work shall be completed by a BCI recommended exclusion professional.			
IV.-2 Prior to the issuance of improvement plans or grading permits, the applicant shall: (a) Clearly indicate on the construction documents that oak trees not scheduled for removal will be protected from construction activities in compliance with the pertinent sections of the City of Rocklin Oak Tree Preservation Ordinance. (b) Mitigate for the removal of oak trees on the project site consistent with the requirements of the City's Oak Tree Preservation Ordinance (Rocklin Municipal Code Section 17.77.080.B). The required mitigation shall be calculated using the formula provided in the Oak Tree Preservation Ordinance and to that end the project arborist shall provide the following information: • The total number of surveyed oak trees; • The total number of oak trees to be removed; • The total number of oak trees to be removed that are to be removed because they are sick or dying, and • The total, in inches, of the trunk diameters at breast height (TDBH) of all surveyed oak trees on the site in each of these categories.	CDD	Prior to improvement plan and/or grading permit approval	

Table 4-1
Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring Agency	Implementation Schedule	Monitoring Compliance Record (Name/Date)
XII. Noise			
XII.-1 All windows or glass doors with a view of Pacific Street shall be fitted with Sound Transmission Class (STC) rating 35 minimum rated assemblies. This would apply specifically to the first row of units closest to Pacific Street, including facades with a perpendicular view of Pacific Street. This conclusion assumes the use of a 3-coat stucco building construction and carpeted room. As an alternative to this blanket requirement, a detailed analysis of interior noise control measures may be conducted when project building plans and flooring types are available. The detailed analysis shall outline specific window, door, and building façade noise control measures utilized to achieve compliance with the 45 dB Ldn interior noise level standard.	CDD	Comply with blanket requirements or prepare noise analysis prior to building permits Install appropriate windows and doors prior to occupancy consistent with blanket requirements or noise analysis	
XII.-2 Air conditioning or mechanical ventilation shall be provided for all residences constructed within this development to allow occupants to keep doors and windows closed for acoustical isolation.	CDD	Incorporate air conditioning and/or mechanical ventilation into project plans prior to building permits Install equipment during construction	
XII.-3 Mechanical ventilation penetrations for bath fans shall not face towards Pacific Street. Where feasible these vents shall be routed towards the opposite side of the building (away from Pacific Street) to minimize sound intrusion to sensitive areas of the building. Where vents must face towards Pacific Street, the duct work shall be increased in length and make as many “S” turns as feasible prior to exiting the dwelling. Flexible duct work is the preferred ducting for this noise mitigation. Where the vents exit the building, a spring loaded flap	CDD	Incorporate vent locations as specified in project plans prior to building permits Install equipment as specified during	

Table 4-1 Mitigation Monitoring and Reporting Program			
Mitigation Measure	**Monitoring Agency**	**Implementation Schedule**	**Monitoring Compliance Record (Name/Date)**
with a gasket shall be installed to reduce sound entering the duct work when the vent is not in use.		construction	

Notes:
CDD = Community Development Department
PSD = Public Services Department

Final Environmental Impact Report

for the

Quarry Row Subdivision Project

(SCH #2017032029)

APPENDICES

Prepared for

City of Rocklin

Prepared by

Adrienne L. Graham, AICP

March 2020

Final Environmental Impact Report

Quarry Row Subdivision Project

SCH #2017032029

Appendices

Prepared for:
City of Rocklin

Prepared by:
Adrienne Graham

March 2020

APPENDICES: TABLE OF CONTENTS

APPENDIX A: AIR QAULITY

KD Anderson & Associates, Inc.
Transportation Engineers

July 22, 2019

Mr. Todd Lowell, J.D.
Lowell Development, Inc.
P.O. Box 1200
Loomis, CA 95650

Subject: ***Quarry Row Project Revised Air Quality and Greenhouse Gas Analysis***

Dear Mr. Lowell:

On behalf of KD Anderson & Associates (KDA), I am pleased to submit this letter report presenting an air quality and greenhouse gas (GHG) analysis of the Quarry Row project in Rocklin. This report presents our understanding of the project, a summary of methods used in the analysis, and summary of the results of our analysis. Details of our analysis are presented in a technical appendix, which is enclosed as a separate electronic file.

Project Understanding

In May of 2016, KDA submitted to you the *Quarry Row Subdivision Project Air Quality Study*. The May 2016 document is a full standalone study of the potential air quality and greenhouse gas (GHG) impacts of the Quarry Row project as it was then proposed.

At the time of the May 2016 study, the Quarry Row project proposed 64 single family dwelling unit (SFDU) lots on the project site. Recently, the Quarry Row project site has been revised to include 76 SFDU lots. Since the time the May 2016 study was prepared, other relevant changes have also occurred:

- The May 2016 study used what was then the most recent version of the CalEEMod air quality software (California Air Pollution Control Officers Association 2016.). New versions of the software were released after preparation of the 2016 study.

- The May 2016 study applied what was then the most recent version of air quality significance thresholds used by the City of Rocklin. The Placer County Air Pollution Control District (PCAPCD) adopted new significance thresholds after preparation of the 2016 study.

- The May 2016 study assumed a construction schedule based on completion of the project in 2018. On July 19, 2019, you provided a revised construction schedule for the Quarry Row project.

To address changes that have occurred since preparation of the May 2016 study, the analysis presented in this letter report:

- assumes the Quarry Row project includes 76 SFDU lots;
- uses version 2016.3.2 of CalEEMod, which is the most recent version available;
- uses the most recent version of significance threshold adopted by the PCAPCD; and
- uses a revised construction schedule you provided on July 19, 2019.

Methodology

The following is a brief description of updated methods used in the analysis presented in this letter report. Methods used in the analysis which have not changed since the May 2016 study are described in detail in the May 2016 study.

Analysis Software. The analysis presented in this letter report uses the CalEEMod air quality analysis software. Version 2016.3.2 of CalEEMod was used. A full description of the CalEEMod model is provided on the CalEEMod internet website (http://www.caleemod.com/). Detailed CalEEMod output report files for the model analyses used in this letter report are enclosed in a technical appendix, presented in a separate electronic file.

Significance Thresholds. The analysis presented in this letter report uses the most recent version of the PCAPCD significance thresholds. The significance thresholds and documentation of the development of the thresholds is provided on the PCAPCD internet website (https://www.placerair.org/1804/CEQA-Thresholds). A summary of the PCAPCD significance thresholds for criteria pollutants is presented in the enclosed **Table 1**.

Analysis Results

The following is summary of the analysis conducted for this letter report.

Construction-Related Criteria Pollutant Emissions. Estimates of construction-related criteria pollutants for the Quarry Row project are presented in the enclosed **Table 2**. This table presents a comparison of project-related emissions and the PCAPCD significance thresholds. As shown in **Table 2**, the Quarry Row project is considered to have a less than significant impact on construction-related criteria pollutant emissions. No mitigation measures are required.

Operational Criteria Pollutant Emissions. Estimates of operational criteria pollutants for the Quarry Row project are presented in the enclosed **Table 3**. This table presents a comparison of project-related emissions and the PCAPCD significance thresholds. As shown in **Table 3**, the

KDA

Quarry Row project is considered to have a less than significant impact on operational criteria pollutant emissions. No mitigation measures are required.

Operational Cumulative-Level Criteria Pollutant Emissions. Estimates of operational cumulative-level criteria pollutants for the Quarry Row project are presented in the enclosed **Table 4**. This table presents a comparison of project-related emissions and the PCAPCD significance thresholds. As shown in **Table 4**, the Quarry Row project is considered to have a less than significant impact on operational cumulative-level criteria pollutant emissions. No mitigation measures are required.

Construction-Related and Operational Greenhouse Gas Emissions. Estimates of construction-related and operational GHG emissions for the Quarry Row project are presented in the enclosed **Table 5**. As described in the May 2016 study, a thresholds of 1,100 metric tons of carbon dioxide equivalent units per year ($MTCO_2e/yr$) is applied to both construction-related and operational emissions. As shown in **Table 5**, the Quarry Row project would generate less than 1,100 $MTCO_2e/yr$ of both construction–related and operational emissions. As a result, the Quarry Row project is considered to have a less than significant impact on construction-related and operational GHG emissions. No mitigation measures are required.

Closing

Thank you for providing KDA with this opportunity to provide you with air quality and GHG analysis services on the Quarry Row project. Please let me know if you have any questions about this report.

Sincerely,

KD Anderson & Associates, Inc.

Wayne Shijo
Project Manager

enclosures

KDA

REFERENCES

Publications Cited

California Air Pollution Control Officers Association. 2016. CalEEMod – California Emissions Estimator Model User's Guide. Sacramento, CA.

Pacific Gas and Electric Company. 2015. Greenhouse Gas Emission Factors: Guidance for PG&E Customers – November 2015. https://www.pge.com/includes/docs/pdfs/shared/environment/calculator/pge_ghg_emission_factor_info_sheet.pdf

Placer County Air Pollution Control District. 2017. CEQA Air Quality Handbook – Assessing and Mitigating Air Quality Impacts Under CEQA. Auburn, CA.

Placer County Air Pollution Control District. 2016a. Placer County Air Pollution Control District Policy – Review of Land Use Projects Under CEQA. Auburn, CA.

Placer County Air Pollution Control District. 2016b. Placer County Air Pollution Control District Policy – California Environmental Quality Act Thresholds of Significance. Auburn, CA.

Personal Communications

Lowell, Todd, J.D., Lowell Development, Inc. May 10, 2016 and July 19, 2019 E-mail messages to Wayne Shijo, KD Anderson & Associates.

Table 1. Placer County Air Pollution Control District
Criteria Pollutant Significance Thresholds

Pollutant	Construction Phase Thresholds	Operational Phase Project-Level Thresholds	Operational Phase Cumulative-Level Thresholds
Reactive Organic Gases (ROG)	82	55	55
Nitrogen Oxides (NO_x)	82	55	55
Inhalable Particulate Matter (PM_{10})	82	82	82

Source: Placer County Air Pollution Control District 2016a.
Note: All thresholds are expressed in pounds per day.

Table 2. Construction-Related Criteria Pollutant Emissions

Pollutant	Project-Related Emissions	Construction Phase Significance Thresholds	Significant Impact?
Reactive Organic Gases (ROG)	66.99	82	No
Nitrogen Oxides (NO_x)	42.47	82	No
Inhalable Particulate Matter (PM_{10})	20.41	82	No

Sources: KD Anderson & Associates 2019, CalEEMod emissions model.
Thresholds from Placer County Air Pollution Control District 2016a.

Notes: All values are expressed in pounds per day.
Values shown are maximums of all construction phases.
Values shown are the maximum of summer and winter values.

Table 3. Operational Criteria Pollutant Emissions

Pollutant	Project-Related Emissions	Operational Phase Project-Level Significance Thresholds	Significant Impact?
Reactive Organic Gases (ROG)	5.09	55	No
Nitrogen Oxides (NO_x)	3.32	55	No
Inhalable Particulate Matter (PM_{10})	4.73	82	No

Sources: KD Anderson & Associates 2019, CalEEMod emissions model.
Thresholds from Placer County Air Pollution Control District 2016a.

Notes: All values are expressed in pounds per day.
Values shown are the maximum of summer and winter values.

Table 4. Operational Cumulative-Level Criteria Pollutant Emissions

Pollutant	Project-Related Emissions	Operational Phase Cumulative-Level Thresholds	Exceeds Cumulative Thresholds?
Reactive Organic Gases (ROG)	5.09	55	No
Nitrogen Oxides (NO_x)	3.06	55	No
Inhalable Particulate Matter (PM_{10})	4.73	82	No

Sources: KD Anderson & Associates 2019, CalEEMod emissions model.
Thresholds from Placer County Air Pollution Control District 2016a.

Notes: All values are expressed in pounds per day.
All values shown are summer (ozone season) values.

Table 5. Greenhouse Gas Emissions

Emissions Category	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	Carbon Dioxide Equivalent (CO_2e)
Construction-Related Emissions (Maximum Year)				
2021 Construction Emissions	326.59	0.06	0.00	328.02
Operational Emissions				
Area Source	60.78	0.00	0.00	61.16
Energy	189.19	0.01	0.00	190.54
Mobile Source	598.92	0.02	0.00	599.41
Waste	15.86	0.94	0.00	39.29
Water	6.53	0.16	0.00	11.74
Total Operational Emissions	871.28	1.13	0.01	902.15

Source: Emissions values are from the CalEEMod Emissions Model (http:/www/caleemod.com)
Notes: All values are in metric tons per year (MT/yr).
Total may not equal sum of components due to rounding.

Quarry Row Project
Air Quality Letter Report
Technical Appendix

CalEEMod Model Output Files

The following CalEEMod emissions model output files are presented below:

CalEEMod Model Output File
Daily Summer Period

CalEEMod Model Output File
Daily Winter Period

CalEEMod Model Output File
Annual Period

CalEEMod Model Output File
Daily Summer Period

Quarry Row

Placer-Sacramento County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.98	Acre	1.98	86,248.80	0
Single Family Housing	76.00	Dwelling Unit	3.95	136,800.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Quarry Row - Placer-Sacramento County, Summer

Project Characteristics - CO2 Intensity Factor from Pacific Gas and Electric 2015.

Land Use - Number of SF lots (76), acreage of SF lots (3.95), and acreage of asphalt-paved surface (1.98) from May 2019 "Quarry Row Tentative Map Lotting Plan".

Demolition - Measurement from Google Earth ruler.

Woodstoves - Natural gas fireplaces for each unit (Lowell pers. comm.).

Energy Use -

Fleet Mix - For a single-family residential use, the unrealistically high default percentages of MDV, LHD1, LHD2, MHD, and HHD was moved to LDA (0.728895).

Construction Phase - Project-specific construction schedule applied to Building Construction, Paving, and Architectural Coating phases.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	297.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblFireplaces	NumberGas	41.80	76.00
tblFireplaces	NumberNoFireplace	7.60	0.00
tblFireplaces	NumberWood	26.60	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	MDV	0.13	0.00

tblFleetMix	MDV	0.13	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblLandUse	LotAcreage	24.68	3.95
tblOffRoadEquipment	UsageHours	6.00	4.70
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblWoodstoves	NumberCatalytic	3.80	0.00
tblWoodstoves	NumberNoncatalytic	3.80	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1464	42.4558	22.3320	0.0427	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	4,151.9271	4,151.9271	1.1955	0.0000	4,178.6720
2021	66.9865	15.9709	14.9576	0.0323	0.6748	0.7499	1.4247	0.1824	0.7051	0.8875	0.0000	3,153.4506	3,153.4506	0.5559	0.0000	3,166.3670
2022	66.9722	1.1257	1.7444	3.3200e-003	0.1068	0.0647	0.1715	0.0283	0.0646	0.0929	0.0000	319.3806	319.3806	0.0165	0.0000	319.7921
Maximum	**66.9865**	**42.4558**	**22.3320**	**0.0427**	**18.2141**	**2.1984**	**20.4125**	**9.9699**	**2.0225**	**11.9924**	**0.0000**	**4,151.9271**	**4,151.9271**	**1.1955**	**0.0000**	**4,178.6720**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1464	42.4558	22.3320	0.0427	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	4,151.9271	4,151.9271	1.1955	0.0000	4,178.6720
2021	66.9865	15.9709	14.9576	0.0323	0.6748	0.7499	1.4247	0.1824	0.7051	0.8875	0.0000	3,153.4506	3,153.4506	0.5559	0.0000	3,166.3670
2022	66.9722	1.1257	1.7444	3.3200e-003	0.1068	0.0647	0.1715	0.0283	0.0646	0.0929	0.0000	319.3806	319.3806	0.0165	0.0000	319.7921
Maximum	**66.9865**	**42.4558**	**22.3320**	**0.0427**	**18.2141**	**2.1984**	**20.4125**	**9.9699**	**2.0225**	**11.9924**	**0.0000**	**4,151.9271**	**4,151.9271**	**1.1955**	**0.0000**	**4,178.6720**

Quarry Row - Placer-Sacramento 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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Energy	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Mobile	1.2595	1.2298	14.4829	0.0417	4.5193	0.0294	4.5488	1.2007	0.0272	1.2279		4,164.0096	4,164.0096	0.1308		4,167.2793
Total	**5.0891**	**3.0587**	**21.5142**	**0.0533**	**4.5193**	**0.2061**	**4.7254**	**1.2007**	**0.2039**	**1.4046**	**0.0000**	**6,417.5680**	**6,417.5680**	**0.1847**	**0.0411**	**6,434.4359**

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	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Energy	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Mobile	1.2595	1.2298	14.4829	0.0417	4.5193	0.0294	4.5488	1.2007	0.0272	1.2279		4,164.0096	4,164.0096	0.1308		4,167.2793
Total	**5.0891**	**3.0587**	**21.5142**	**0.0533**	**4.5193**	**0.2061**	**4.7254**	**1.2007**	**0.2039**	**1.4046**	**0.0000**	**6,417.5680**	**6,417.5680**	**0.1847**	**0.0411**	**6,434.4359**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	
2	Site Preparation	Site Preparation	7/29/2020	8/11/2020	5	10	
3	Grading	Grading	8/12/2020	9/8/2020	5	20	
4	Building Construction	Building Construction	9/9/2020	10/28/2021	5	297	
5	Paving	Paving	10/29/2021	12/3/2021	5	26	
6	Architectural Coating	Architectural Coating	12/4/2021	1/10/2022	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.98

Residential Indoor: 277,020; Residential Outdoor: 92,340; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,175 (Architectural Coating – sqft)

OffRoad Equipment

Quarry Row - Placer-Sacramento 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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	5.40	231	0.29
Building Construction	Forklifts	3	6.20	89	0.20
Building Construction	Generator Sets	1	6.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	5.40	97	0.37
Building Construction	Welders	1	6.20	46	0.45
Paving	Pavers	2	6.20	130	0.42
Paving	Paving Equipment	2	6.20	132	0.36
Paving	Rollers	2	6.20	80	0.38
Architectural Coating	Air Compressors	1	4.70	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	65.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7060	0.0000	0.7060	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7060**	**1.6587**	**2.3647**	**0.1069**	**1.5419**	**1.6488**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 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	0.0259	0.8791	0.1387	2.6900e-003	0.0569	3.0700e-003	0.0599	0.0156	2.9400e-003	0.0185		281.4228	281.4228	8.8300e-003		281.6436
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0320	0.4402	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.7994	122.7994	3.0200e-003		122.8748
Total	**0.0841**	**0.9112**	**0.5788**	**3.9200e-003**	**0.1801**	**3.8500e-003**	**0.1839**	**0.0483**	**3.6600e-003**	**0.0519**		**404.2222**	**404.2222**	**0.0119**		**404.5184**

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					0.7060	0.0000	0.7060	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7060**	**1.6587**	**2.3647**	**0.1069**	**1.5419**	**1.6488**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 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	0.0259	0.8791	0.1387	2.6900e-003	0.0569	3.0700e-003	0.0599	0.0156	2.9400e-003	0.0185		281.4228	281.4228	8.8300e-003		281.6436
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0320	0.4402	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.7994	122.7994	3.0200e-003		122.8748
Total	**0.0841**	**0.9112**	**0.5788**	**3.9200e-003**	**0.1801**	**3.8500e-003**	**0.1839**	**0.0483**	**3.6600e-003**	**0.0519**		**404.2222**	**404.2222**	**0.0119**		**404.5184**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 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	0.0699	0.0384	0.5282	1.4800e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		147.3592	147.3592	3.6200e-003		147.4497
Total	**0.0699**	**0.0384**	**0.5282**	**1.4800e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**147.3592**	**147.3592**	**3.6200e-003**		**147.4497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0699	0.0384	0.5282	1.4800e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		147.3592	147.3592	3.6200e-003		147.4497
Total	**0.0699**	**0.0384**	**0.5282**	**1.4800e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**147.3592**	**147.3592**	**3.6200e-003**		**147.4497**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 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	0.0583	0.0320	0.4402	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.7994	122.7994	3.0200e-003		122.8748
Total	**0.0583**	**0.0320**	**0.4402**	**1.2300e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**122.7994**	**122.7994**	**3.0200e-003**		**122.8748**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 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	0.0583	0.0320	0.4402	1.2300e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		122.7994	122.7994	3.0200e-003		122.8748
Total	**0.0583**	**0.0320**	**0.4402**	**1.2300e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**122.7994**	**122.7994**	**3.0200e-003**		**122.8748**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6395	14.8326	13.0296	0.0208		0.8638	0.8638		0.8122	0.8122		1,974.0579	1,974.0579	0.4812		1,986.0889
Total	**1.6395**	**14.8326**	**13.0296**	**0.0208**		**0.8638**	**0.8638**		**0.8122**	**0.8122**		**1,974.0579**	**1,974.0579**	**0.4812**		**1,986.0889**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0791	2.5777	0.4695	6.4900e-003	0.1490	0.0113	0.1603	0.0429	0.0108	0.0537		678.9743	678.9743	0.0310		679.7480
Worker	0.2485	0.1367	1.8780	5.2600e-003	0.5257	3.3400e-003	0.5291	0.1395	3.0800e-003	0.1425		523.9440	523.9440	0.0129		524.2657
Total	**0.3276**	**2.7143**	**2.3475**	**0.0118**	**0.6748**	**0.0146**	**0.6894**	**0.1824**	**0.0139**	**0.1962**		**1,202.9183**	**1,202.9183**	**0.0438**		**1,204.0137**

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	1.6395	14.8326	13.0296	0.0208		0.8638	0.8638		0.8122	0.8122	0.0000	1,974.0579	1,974.0579	0.4812		1,986.0889
Total	**1.6395**	**14.8326**	**13.0296**	**0.0208**		**0.8638**	**0.8638**		**0.8122**	**0.8122**	**0.0000**	**1,974.0579**	**1,974.0579**	**0.4812**		**1,986.0889**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0791	2.5777	0.4695	6.4900e-003	0.1490	0.0113	0.1603	0.0429	0.0108	0.0537		678.9743	678.9743	0.0310		679.7480
Worker	0.2485	0.1367	1.8780	5.2600e-003	0.5257	3.3400e-003	0.5291	0.1395	3.0800e-003	0.1425		523.9440	523.9440	0.0129		524.2657
Total	**0.3276**	**2.7143**	**2.3475**	**0.0118**	**0.6748**	**0.0146**	**0.6894**	**0.1824**	**0.0139**	**0.1962**		**1,202.9183**	**1,202.9183**	**0.0438**		**1,204.0137**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4702	13.4770	12.8184	0.0208		0.7413	0.7413		0.6970	0.6970		1,974.2900	1,974.2900	0.4759		1,986.1884
Total	**1.4702**	**13.4770**	**12.8184**	**0.0208**		**0.7413**	**0.7413**		**0.6970**	**0.6970**		**1,974.2900**	**1,974.2900**	**0.4759**		**1,986.1884**

3.5 Building Construction - 2021

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	0.0661	2.3715	0.4152	6.4400e-003	0.1490	5.3800e-003	0.1544	0.0429	5.1400e-003	0.0480		673.6653	673.6653	0.0292		674.3952
Worker	0.2312	0.1225	1.7240	5.0700e-003	0.5257	3.2500e-003	0.5290	0.1395	3.0000e-003	0.1425		505.4952	505.4952	0.0115		505.7834
Total	**0.2972**	**2.4940**	**2.1392**	**0.0115**	**0.6748**	**8.6300e-003**	**0.6834**	**0.1824**	**8.1400e-003**	**0.1905**		**1,179.1605**	**1,179.1605**	**0.0407**		**1,180.1786**

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	1.4702	13.4770	12.8184	0.0208		0.7413	0.7413		0.6970	0.6970	0.0000	1,974.2900	1,974.2900	0.4759		1,986.1884
Total	**1.4702**	**13.4770**	**12.8184**	**0.0208**		**0.7413**	**0.7413**		**0.6970**	**0.6970**	**0.0000**	**1,974.2900**	**1,974.2900**	**0.4759**		**1,986.1884**

3.5 Building Construction - 2021

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	0.0661	2.3715	0.4152	6.4400e-003	0.1490	5.3800e-003	0.1544	0.0429	5.1400e-003	0.0480		673.6653	673.6653	0.0292		674.3952
Worker	0.2312	0.1225	1.7240	5.0700e-003	0.5257	3.2500e-003	0.5290	0.1395	3.0000e-003	0.1425		505.4952	505.4952	0.0115		505.7834
Total	**0.2972**	**2.4940**	**2.1392**	**0.0115**	**0.6748**	**8.6300e-003**	**0.6834**	**0.1824**	**8.1400e-003**	**0.1905**		**1,179.1605**	**1,179.1605**	**0.0407**		**1,180.1786**

3.6 Paving - 2021

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	0.9731	10.0123	11.3563	0.0177		0.5252	0.5252		0.4832	0.4832		1,710.5884	1,710.5884	0.5532		1,724.4194
Paving	0.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1726**	**10.0123**	**11.3563**	**0.0177**		**0.5252**	**0.5252**		**0.4832**	**0.4832**		**1,710.5884**	**1,710.5884**	**0.5532**		**1,724.4194**

3.6 Paving - 2021

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	0.0542	0.0287	0.4041	1.1900e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		118.4754	118.4754	2.7000e-003		118.5430
Total	**0.0542**	**0.0287**	**0.4041**	**1.1900e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**118.4754**	**118.4754**	**2.7000e-003**		**118.5430**

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	0.9731	10.0123	11.3563	0.0177		0.5252	0.5252		0.4832	0.4832	0.0000	1,710.5884	1,710.5884	0.5532		1,724.4194
Paving	0.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1726**	**10.0123**	**11.3563**	**0.0177**		**0.5252**	**0.5252**		**0.4832**	**0.4832**	**0.0000**	**1,710.5884**	**1,710.5884**	**0.5532**		**1,724.4194**

3.6 Paving - 2021

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	0.0542	0.0287	0.4041	1.1900e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		118.4754	118.4754	2.7000e-003		118.5430
Total	**0.0542**	**0.0287**	**0.4041**	**1.1900e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**118.4754**	**118.4754**	**2.7000e-003**		**118.5430**

3.7 Architectural Coating - 2021

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1715	1.1960	1.4238	2.3300e-003		0.0737	0.0737		0.0737	0.0737		220.4676	220.4676	0.0151		220.8459
Total	**66.9395**	**1.1960**	**1.4238**	**2.3300e-003**		**0.0737**	**0.0737**		**0.0737**	**0.0737**		**220.4676**	**220.4676**	**0.0151**		**220.8459**

3.7 Architectural Coating - 2021

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	0.0470	0.0249	0.3502	1.0300e-003	0.1068	6.6000e-004	0.1075	0.0283	6.1000e-004	0.0289		102.6787	102.6787	2.3400e-003		102.7373
Total	**0.0470**	**0.0249**	**0.3502**	**1.0300e-003**	**0.1068**	**6.6000e-004**	**0.1075**	**0.0283**	**6.1000e-004**	**0.0289**		**102.6787**	**102.6787**	**2.3400e-003**		**102.7373**

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1715	1.1960	1.4238	2.3300e-003		0.0737	0.0737		0.0737	0.0737	0.0000	220.4676	220.4676	0.0151		220.8459
Total	**66.9395**	**1.1960**	**1.4238**	**2.3300e-003**		**0.0737**	**0.0737**		**0.0737**	**0.0737**	**0.0000**	**220.4676**	**220.4676**	**0.0151**		**220.8459**

3.7 Architectural Coating - 2021

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	0.0470	0.0249	0.3502	1.0300e-003	0.1068	6.6000e-004	0.1075	0.0283	6.1000e-004	0.0289		102.6787	102.6787	2.3400e-003		102.7373
Total	**0.0470**	**0.0249**	**0.3502**	**1.0300e-003**	**0.1068**	**6.6000e-004**	**0.1075**	**0.0283**	**6.1000e-004**	**0.0289**		**102.6787**	**102.6787**	**2.3400e-003**		**102.7373**

3.7 Architectural Coating - 2022

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1602	1.1033	1.4207	2.3300e-003		0.0640	0.0640		0.0640	0.0640		220.4676	220.4676	0.0144		220.8265
Total	**66.9283**	**1.1033**	**1.4207**	**2.3300e-003**		**0.0640**	**0.0640**		**0.0640**	**0.0640**		**220.4676**	**220.4676**	**0.0144**		**220.8265**

3.7 Architectural Coating - 2022

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	0.0439	0.0224	0.3237	9.9000e-004	0.1068	6.5000e-004	0.1074	0.0283	5.9000e-004	0.0289		98.9130	98.9130	2.1100e-003		98.9656
Total	**0.0439**	**0.0224**	**0.3237**	**9.9000e-004**	**0.1068**	**6.5000e-004**	**0.1074**	**0.0283**	**5.9000e-004**	**0.0289**		**98.9130**	**98.9130**	**2.1100e-003**		**98.9656**

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1602	1.1033	1.4207	2.3300e-003		0.0640	0.0640		0.0640	0.0640	0.0000	220.4676	220.4676	0.0144		220.8265
Total	**66.9283**	**1.1033**	**1.4207**	**2.3300e-003**		**0.0640**	**0.0640**		**0.0640**	**0.0640**	**0.0000**	**220.4676**	**220.4676**	**0.0144**		**220.8265**

3.7 Architectural Coating - 2022

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	0.0439	0.0224	0.3237	9.9000e-004	0.1068	6.5000e-004	0.1074	0.0283	5.9000e-004	0.0289		98.9130	98.9130	2.1100e-003		98.9656
Total	**0.0439**	**0.0224**	**0.3237**	**9.9000e-004**	**0.1068**	**6.5000e-004**	**0.1074**	**0.0283**	**5.9000e-004**	**0.0289**		**98.9130**	**98.9130**	**2.1100e-003**		**98.9656**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2595	1.2298	14.4829	0.0417	4.5193	0.0294	4.5488	1.2007	0.0272	1.2279		4,164.0096	4,164.0096	0.1308		4,167.2793
Unmitigated	1.2595	1.2298	14.4829	0.0417	4.5193	0.0294	4.5488	1.2007	0.0272	1.2279		4,164.0096	4,164.0096	0.1308		4,167.2793

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	723.52	753.16	655.12	2,056,692	2,056,692
Total	723.52	753.16	655.12	2,056,692	2,056,692

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232
Single Family Housing	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
NaturalGas Unmitigated	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170

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					
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
Single Family Housing	5379.28	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Total		**0.0580**	**0.4957**	**0.2110**	**3.1600e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**		**632.8562**	**632.8562**	**0.0121**	**0.0116**	**636.6170**

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					
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
Single Family Housing	5.37928	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Total		**0.0580**	**0.4957**	**0.2110**	**3.1600e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**		**632.8562**	**632.8562**	**0.0121**	**0.0116**	**636.6170**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Unmitigated	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397

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	0.4756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1475	1.2607	0.5365	8.0500e-003		0.1019	0.1019		0.1019	0.1019	0.0000	1,609.4118	1,609.4118	0.0309	0.0295	1,618.9757
Landscaping	0.1904	0.0725	6.2839	3.3000e-004		0.0346	0.0346		0.0346	0.0346		11.2904	11.2904	0.0109		11.5640
Total	**3.7716**	**1.3333**	**6.8204**	**8.3800e-003**		**0.1366**	**0.1366**		**0.1366**	**0.1366**	**0.0000**	**1,620.7022**	**1,620.7022**	**0.0418**	**0.0295**	**1,630.5397**

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	0.4756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1475	1.2607	0.5365	8.0500e-003		0.1019	0.1019		0.1019	0.1019	0.0000	1,609.4118	1,609.4118	0.0309	0.0295	1,618.9757
Landscaping	0.1904	0.0725	6.2839	3.3000e-004		0.0346	0.0346		0.0346	0.0346		11.2904	11.2904	0.0109		11.5640
Total	**3.7716**	**1.3333**	**6.8204**	**8.3800e-003**		**0.1366**	**0.1366**		**0.1366**	**0.1366**	**0.0000**	**1,620.7022**	**1,620.7022**	**0.0418**	**0.0295**	**1,630.5397**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Model Output File
Daily Winter Period

Quarry Row

Placer-Sacramento County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.98	Acre	1.98	86,248.80	0
Single Family Housing	76.00	Dwelling Unit	3.95	136,800.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Quarry Row - Placer-Sacramento County, Winter

Project Characteristics - CO2 Intensity Factor from Pacific Gas and Electric 2015.

Land Use - Number of SF lots (76), acreage of SF lots (3.95), and acreage of asphalt-paved surface (1.98) from May 2019 "Quarry Row Tentative Map Lotting Plan".

Demolition - Measurement from Google Earth ruler.

Woodstoves - Natural gas fireplaces for each unit (Lowell pers. comm.).

Energy Use -

Fleet Mix - For a single-family residential use, the unrealistically high default percentages of MDV, LHD1, LHD2, MHD, and HHD was moved to LDA (0.728895).

Construction Phase - Project-specific construction schedule applied to Building Construction, Paving, and Architectural Coating phases.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	297.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblFireplaces	NumberGas	41.80	76.00
tblFireplaces	NumberNoFireplace	7.60	0.00
tblFireplaces	NumberWood	26.60	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	MDV	0.13	0.00

tblFleetMix	MDV	0.13	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblLandUse	LotAcreage	24.68	3.95
tblOffRoadEquipment	UsageHours	6.00	4.70
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblWoodstoves	NumberCatalytic	3.80	0.00
tblWoodstoves	NumberNoncatalytic	3.80	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1441	42.4655	22.3049	0.0425	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	4,131.9108	4,131.9108	1.1951	0.0000	4,158.6765
2021	66.9850	16.0182	14.8616	0.0316	0.6748	0.7502	1.4249	0.1824	0.7054	0.8877	0.0000	3,075.2260	3,075.2260	0.5557	0.0000	3,088.2128
2022	66.9709	1.1313	1.7072	3.2100e-003	0.1068	0.0647	0.1715	0.0283	0.0646	0.0929	0.0000	308.5360	308.5360	0.0163	0.0000	308.9423
Maximum	**66.9850**	**42.4655**	**22.3049**	**0.0425**	**18.2141**	**2.1984**	**20.4125**	**9.9699**	**2.0225**	**11.9924**	**0.0000**	**4,131.9108**	**4,131.9108**	**1.1951**	**0.0000**	**4,158.6765**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1441	42.4655	22.3049	0.0425	18.2141	2.1984	20.4125	9.9699	2.0225	11.9924	0.0000	4,131.9108	4,131.9108	1.1951	0.0000	4,158.6765
2021	66.9850	16.0182	14.8616	0.0316	0.6748	0.7502	1.4249	0.1824	0.7054	0.8877	0.0000	3,075.2260	3,075.2260	0.5557	0.0000	3,088.2128
2022	66.9709	1.1313	1.7072	3.2100e-003	0.1068	0.0647	0.1715	0.0283	0.0646	0.0929	0.0000	308.5360	308.5360	0.0163	0.0000	308.9423
Maximum	**66.9850**	**42.4655**	**22.3049**	**0.0425**	**18.2141**	**2.1984**	**20.4125**	**9.9699**	**2.0225**	**11.9924**	**0.0000**	**4,131.9108**	**4,131.9108**	**1.1951**	**0.0000**	**4,158.6765**

Quarry Row - Placer-Sacramento 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Energy	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Mobile	0.9419	1.4879	13.5915	0.0373	4.5193	0.0295	4.5488	1.2007	0.0272	1.2279		3,719.0523	3,719.0523	0.1279		3,722.2495
Total	**4.7715**	**3.3169**	**20.6229**	**0.0488**	**4.5193**	**0.2061**	**4.7254**	**1.2007**	**0.2039**	**1.4046**	**0.0000**	**5,972.6107**	**5,972.6107**	**0.1818**	**0.0411**	**5,989.4061**

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	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Energy	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Mobile	0.9419	1.4879	13.5915	0.0373	4.5193	0.0295	4.5488	1.2007	0.0272	1.2279		3,719.0523	3,719.0523	0.1279		3,722.2495
Total	**4.7715**	**3.3169**	**20.6229**	**0.0488**	**4.5193**	**0.2061**	**4.7254**	**1.2007**	**0.2039**	**1.4046**	**0.0000**	**5,972.6107**	**5,972.6107**	**0.1818**	**0.0411**	**5,989.4061**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	
2	Site Preparation	Site Preparation	7/29/2020	8/11/2020	5	10	
3	Grading	Grading	8/12/2020	9/8/2020	5	20	
4	Building Construction	Building Construction	9/9/2020	10/28/2021	5	297	
5	Paving	Paving	10/29/2021	12/3/2021	5	26	
6	Architectural Coating	Architectural Coating	12/4/2021	1/10/2022	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.98

Residential Indoor: 277,020; Residential Outdoor: 92,340; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,175 (Architectural Coating – sqft)

OffRoad Equipment

Quarry Row - Placer-Sacramento 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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	5.40	231	0.29
Building Construction	Forklifts	3	6.20	89	0.20
Building Construction	Generator Sets	1	6.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	5.40	97	0.37
Building Construction	Welders	1	6.20	46	0.45
Paving	Pavers	2	6.20	130	0.42
Paving	Paving Equipment	2	6.20	132	0.36
Paving	Rollers	2	6.20	80	0.38
Architectural Coating	Air Compressors	1	4.70	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	65.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.7060	0.0000	0.7060	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7060**	**1.6587**	**2.3647**	**0.1069**	**1.5419**	**1.6488**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 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	0.0269	0.9014	0.1574	2.6200e-003	0.0569	3.1500e-003	0.0600	0.0156	3.0200e-003	0.0186		274.8822	274.8822	9.9400e-003		275.1307
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0401	0.3943	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.3237	109.3237	2.7400e-003		109.3922
Total	**0.0832**	**0.9415**	**0.5517**	**3.7200e-003**	**0.1801**	**3.9300e-003**	**0.1840**	**0.0483**	**3.7400e-003**	**0.0520**		**384.2059**	**384.2059**	**0.0127**		**384.5229**

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					0.7060	0.0000	0.7060	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7060**	**1.6587**	**2.3647**	**0.1069**	**1.5419**	**1.6488**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 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	0.0269	0.9014	0.1574	2.6200e-003	0.0569	3.1500e-003	0.0600	0.0156	3.0200e-003	0.0186		274.8822	274.8822	9.9400e-003		275.1307
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0563	0.0401	0.3943	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.3237	109.3237	2.7400e-003		109.3922
Total	**0.0832**	**0.9415**	**0.5517**	**3.7200e-003**	**0.1801**	**3.9300e-003**	**0.1840**	**0.0483**	**3.7400e-003**	**0.0520**		**384.2059**	**384.2059**	**0.0127**		**384.5229**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 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	0.0676	0.0482	0.4732	1.3200e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		131.1885	131.1885	3.2900e-003		131.2707
Total	**0.0676**	**0.0482**	**0.4732**	**1.3200e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**131.1885**	**131.1885**	**3.2900e-003**		**131.2707**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	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	0.0676	0.0482	0.4732	1.3200e-003	0.1479	9.4000e-004	0.1488	0.0392	8.7000e-004	0.0401		131.1885	131.1885	3.2900e-003		131.2707
Total	**0.0676**	**0.0482**	**0.4732**	**1.3200e-003**	**0.1479**	**9.4000e-004**	**0.1488**	**0.0392**	**8.7000e-004**	**0.0401**		**131.1885**	**131.1885**	**3.2900e-003**		**131.2707**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 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	0.0563	0.0401	0.3943	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.3237	109.3237	2.7400e-003		109.3922
Total	**0.0563**	**0.0401**	**0.3943**	**1.1000e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**109.3237**	**109.3237**	**2.7400e-003**		**109.3922**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5523**	**1.2734**	**7.8258**	**3.3675**	**1.1716**	**4.5390**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 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	0.0563	0.0401	0.3943	1.1000e-003	0.1232	7.8000e-004	0.1240	0.0327	7.2000e-004	0.0334		109.3237	109.3237	2.7400e-003		109.3922
Total	**0.0563**	**0.0401**	**0.3943**	**1.1000e-003**	**0.1232**	**7.8000e-004**	**0.1240**	**0.0327**	**7.2000e-004**	**0.0334**		**109.3237**	**109.3237**	**2.7400e-003**		**109.3922**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6395	14.8326	13.0296	0.0208		0.8638	0.8638		0.8122	0.8122		1,974.0579	1,974.0579	0.4812		1,986.0889
Total	**1.6395**	**14.8326**	**13.0296**	**0.0208**		**0.8638**	**0.8638**		**0.8122**	**0.8122**		**1,974.0579**	**1,974.0579**	**0.4812**		**1,986.0889**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0838	2.6044	0.5692	6.2700e-003	0.1490	0.0116	0.1606	0.0429	0.0111	0.0540		656.2021	656.2021	0.0350		657.0770
Worker	0.2404	0.1712	1.6823	4.6800e-003	0.5257	3.3400e-003	0.5291	0.1395	3.0800e-003	0.1425		466.4478	466.4478	0.0117		466.7402
Total	**0.3242**	**2.7756**	**2.2515**	**0.0110**	**0.6748**	**0.0150**	**0.6897**	**0.1824**	**0.0142**	**0.1965**		**1,122.6500**	**1,122.6500**	**0.0467**		**1,123.8173**

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	1.6395	14.8326	13.0296	0.0208		0.8638	0.8638		0.8122	0.8122	0.0000	1,974.0579	1,974.0579	0.4812		1,986.0889
Total	**1.6395**	**14.8326**	**13.0296**	**0.0208**		**0.8638**	**0.8638**		**0.8122**	**0.8122**	**0.0000**	**1,974.0579**	**1,974.0579**	**0.4812**		**1,986.0889**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0838	2.6044	0.5692	6.2700e-003	0.1490	0.0116	0.1606	0.0429	0.0111	0.0540		656.2021	656.2021	0.0350		657.0770
Worker	0.2404	0.1712	1.6823	4.6800e-003	0.5257	3.3400e-003	0.5291	0.1395	3.0800e-003	0.1425		466.4478	466.4478	0.0117		466.7402
Total	**0.3242**	**2.7756**	**2.2515**	**0.0110**	**0.6748**	**0.0150**	**0.6897**	**0.1824**	**0.0142**	**0.1965**		**1,122.6500**	**1,122.6500**	**0.0467**		**1,123.8173**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4702	13.4770	12.8184	0.0208		0.7413	0.7413		0.6970	0.6970		1,974.2900	1,974.2900	0.4759		1,986.1884
Total	**1.4702**	**13.4770**	**12.8184**	**0.0208**		**0.7413**	**0.7413**		**0.6970**	**0.6970**		**1,974.2900**	**1,974.2900**	**0.4759**		**1,986.1884**

3.5 Building Construction - 2021

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	0.0705	2.3879	0.5077	6.2200e-003	0.1490	5.6500e-003	0.1547	0.0429	5.4000e-003	0.0483		650.8951	650.8951	0.0331		651.7225
Worker	0.2238	0.1534	1.5355	4.5200e-003	0.5257	3.2500e-003	0.5290	0.1395	3.0000e-003	0.1425		450.0409	450.0409	0.0104		450.3019
Total	**0.2943**	**2.5412**	**2.0432**	**0.0107**	**0.6748**	**8.9000e-003**	**0.6837**	**0.1824**	**8.4000e-003**	**0.1908**		**1,100.9360**	**1,100.9360**	**0.0435**		**1,102.0244**

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	1.4702	13.4770	12.8184	0.0208		0.7413	0.7413		0.6970	0.6970	0.0000	1,974.2900	1,974.2900	0.4759		1,986.1884
Total	**1.4702**	**13.4770**	**12.8184**	**0.0208**		**0.7413**	**0.7413**		**0.6970**	**0.6970**	**0.0000**	**1,974.2900**	**1,974.2900**	**0.4759**		**1,986.1884**

3.5 Building Construction - 2021

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	0.0705	2.3879	0.5077	6.2200e-003	0.1490	5.6500e-003	0.1547	0.0429	5.4000e-003	0.0483		650.8951	650.8951	0.0331		651.7225
Worker	0.2238	0.1534	1.5355	4.5200e-003	0.5257	3.2500e-003	0.5290	0.1395	3.0000e-003	0.1425		450.0409	450.0409	0.0104		450.3019
Total	**0.2943**	**2.5412**	**2.0432**	**0.0107**	**0.6748**	**8.9000e-003**	**0.6837**	**0.1824**	**8.4000e-003**	**0.1908**		**1,100.9360**	**1,100.9360**	**0.0435**		**1,102.0244**

3.6 Paving - 2021

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	0.9731	10.0123	11.3563	0.0177		0.5252	0.5252		0.4832	0.4832		1,710.5884	1,710.5884	0.5532		1,724.4194
Paving	0.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1726**	**10.0123**	**11.3563**	**0.0177**		**0.5252**	**0.5252**		**0.4832**	**0.4832**		**1,710.5884**	**1,710.5884**	**0.5532**		**1,724.4194**

3.6 Paving - 2021

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	0.0360	0.3599	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4783	105.4783	2.4500e-003		105.5395
Total	**0.0525**	**0.0360**	**0.3599**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4783**	**105.4783**	**2.4500e-003**		**105.5395**

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	0.9731	10.0123	11.3563	0.0177		0.5252	0.5252		0.4832	0.4832	0.0000	1,710.5884	1,710.5884	0.5532		1,724.4194
Paving	0.1995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1726**	**10.0123**	**11.3563**	**0.0177**		**0.5252**	**0.5252**		**0.4832**	**0.4832**	**0.0000**	**1,710.5884**	**1,710.5884**	**0.5532**		**1,724.4194**

3.6 Paving - 2021

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	0.0360	0.3599	1.0600e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		105.4783	105.4783	2.4500e-003		105.5395
Total	**0.0525**	**0.0360**	**0.3599**	**1.0600e-003**	**0.1232**	**7.6000e-004**	**0.1240**	**0.0327**	**7.0000e-004**	**0.0334**		**105.4783**	**105.4783**	**2.4500e-003**		**105.5395**

3.7 Architectural Coating - 2021

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1715	1.1960	1.4238	2.3300e-003		0.0737	0.0737		0.0737	0.0737		220.4676	220.4676	0.0151		220.8459
Total	**66.9395**	**1.1960**	**1.4238**	**2.3300e-003**		**0.0737**	**0.0737**		**0.0737**	**0.0737**		**220.4676**	**220.4676**	**0.0151**		**220.8459**

3.7 Architectural Coating - 2021

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	0.0455	0.0312	0.3119	9.2000e-004	0.1068	6.6000e-004	0.1075	0.0283	6.1000e-004	0.0289		91.4146	91.4146	2.1200e-003		91.4676
Total	**0.0455**	**0.0312**	**0.3119**	**9.2000e-004**	**0.1068**	**6.6000e-004**	**0.1075**	**0.0283**	**6.1000e-004**	**0.0289**		**91.4146**	**91.4146**	**2.1200e-003**		**91.4676**

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1715	1.1960	1.4238	2.3300e-003		0.0737	0.0737		0.0737	0.0737	0.0000	220.4676	220.4676	0.0151		220.8459
Total	**66.9395**	**1.1960**	**1.4238**	**2.3300e-003**		**0.0737**	**0.0737**		**0.0737**	**0.0737**	**0.0000**	**220.4676**	**220.4676**	**0.0151**		**220.8459**

3.7 Architectural Coating - 2021

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	0.0455	0.0312	0.3119	9.2000e-004	0.1068	6.6000e-004	0.1075	0.0283	6.1000e-004	0.0289		91.4146	91.4146	2.1200e-003		91.4676
Total	**0.0455**	**0.0312**	**0.3119**	**9.2000e-004**	**0.1068**	**6.6000e-004**	**0.1075**	**0.0283**	**6.1000e-004**	**0.0289**		**91.4146**	**91.4146**	**2.1200e-003**		**91.4676**

3.7 Architectural Coating - 2022

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1602	1.1033	1.4207	2.3300e-003		0.0640	0.0640		0.0640	0.0640		220.4676	220.4676	0.0144		220.8265
Total	**66.9283**	**1.1033**	**1.4207**	**2.3300e-003**		**0.0640**	**0.0640**		**0.0640**	**0.0640**		**220.4676**	**220.4676**	**0.0144**		**220.8265**

3.7 Architectural Coating - 2022

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	0.0426	0.0280	0.2865	8.8000e-004	0.1068	6.5000e-004	0.1074	0.0283	5.9000e-004	0.0289		88.0683	88.0683	1.9000e-003		88.1158
Total	**0.0426**	**0.0280**	**0.2865**	**8.8000e-004**	**0.1068**	**6.5000e-004**	**0.1074**	**0.0283**	**5.9000e-004**	**0.0289**		**88.0683**	**88.0683**	**1.9000e-003**		**88.1158**

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	66.7681					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1602	1.1033	1.4207	2.3300e-003		0.0640	0.0640		0.0640	0.0640	0.0000	220.4676	220.4676	0.0144		220.8265
Total	**66.9283**	**1.1033**	**1.4207**	**2.3300e-003**		**0.0640**	**0.0640**		**0.0640**	**0.0640**	**0.0000**	**220.4676**	**220.4676**	**0.0144**		**220.8265**

3.7 Architectural Coating - 2022

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	0.0426	0.0280	0.2865	8.8000e-004	0.1068	6.5000e-004	0.1074	0.0283	5.9000e-004	0.0289		88.0683	88.0683	1.9000e-003		88.1158
Total	**0.0426**	**0.0280**	**0.2865**	**8.8000e-004**	**0.1068**	**6.5000e-004**	**0.1074**	**0.0283**	**5.9000e-004**	**0.0289**		**88.0683**	**88.0683**	**1.9000e-003**		**88.1158**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.9419	1.4879	13.5915	0.0373	4.5193	0.0295	4.5488	1.2007	0.0272	1.2279		3,719.0523	3,719.0523	0.1279		3,722.2495
Unmitigated	0.9419	1.4879	13.5915	0.0373	4.5193	0.0295	4.5488	1.2007	0.0272	1.2279		3,719.0523	3,719.0523	0.1279		3,722.2495

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	723.52	753.16	655.12	2,056,692	2,056,692
Total	723.52	753.16	655.12	2,056,692	2,056,692

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232
Single Family Housing	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
NaturalGas Unmitigated	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170

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					
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
Single Family Housing	5379.28	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Total		**0.0580**	**0.4957**	**0.2110**	**3.1600e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**		**632.8562**	**632.8562**	**0.0121**	**0.0116**	**636.6170**

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					
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
Single Family Housing	5.37928	0.0580	0.4957	0.2110	3.1600e-003		0.0401	0.0401		0.0401	0.0401		632.8562	632.8562	0.0121	0.0116	636.6170
Total		**0.0580**	**0.4957**	**0.2110**	**3.1600e-003**		**0.0401**	**0.0401**		**0.0401**	**0.0401**		**632.8562**	**632.8562**	**0.0121**	**0.0116**	**636.6170**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397
Unmitigated	3.7716	1.3332	6.8204	8.3800e-003		0.1366	0.1366		0.1366	0.1366	0.0000	1,620.7022	1,620.7022	0.0418	0.0295	1,630.5397

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	0.4756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1475	1.2607	0.5365	8.0500e-003		0.1019	0.1019		0.1019	0.1019	0.0000	1,609.4118	1,609.4118	0.0309	0.0295	1,618.9757
Landscaping	0.1904	0.0725	6.2839	3.3000e-004		0.0346	0.0346		0.0346	0.0346		11.2904	11.2904	0.0109		11.5640
Total	**3.7716**	**1.3333**	**6.8204**	**8.3800e-003**		**0.1366**	**0.1366**		**0.1366**	**0.1366**	**0.0000**	**1,620.7022**	**1,620.7022**	**0.0418**	**0.0295**	**1,630.5397**

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	0.4756					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.9581					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.1475	1.2607	0.5365	8.0500e-003		0.1019	0.1019		0.1019	0.1019	0.0000	1,609.4118	1,609.4118	0.0309	0.0295	1,618.9757
Landscaping	0.1904	0.0725	6.2839	3.3000e-004		0.0346	0.0346		0.0346	0.0346		11.2904	11.2904	0.0109		11.5640
Total	**3.7716**	**1.3333**	**6.8204**	**8.3800e-003**		**0.1366**	**0.1366**		**0.1366**	**0.1366**	**0.0000**	**1,620.7022**	**1,620.7022**	**0.0418**	**0.0295**	**1,630.5397**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Model Output File
Annual Period

Quarry Row

Placer-Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.98	Acre	1.98	86,248.80	0
Single Family Housing	76.00	Dwelling Unit	3.95	136,800.00	217

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	74
Climate Zone	2			**Operational Year**	2021
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	290	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor from Pacific Gas and Electric 2015.

Land Use - Number of SF lots (76), acreage of SF lots (3.95), and acreage of asphalt-paved surface (1.98) from May 2019 "Quarry Row Tentative Map Lotting Plan".

Demolition - Measurement from Google Earth ruler.

Woodstoves - Natural gas fireplaces for each unit (Lowell pers. comm.).

Energy Use -

Fleet Mix - For a single-family residential use, the unrealistically high default percentages of MDV, LHD1, LHD2, MHD, and HHD was moved to LDA (0.728895).

Construction Phase - Project-specific construction schedule applied to Building Construction, Paving, and Architectural Coating phases.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Off-road Equipment - Hours per day adjusted to reflect project-specific construction schedule.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	297.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblFireplaces	NumberGas	41.80	76.00
tblFireplaces	NumberNoFireplace	7.60	0.00
tblFireplaces	NumberWood	26.60	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.00
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LDA	0.49	0.73
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	LHD2	6.2840e-003	0.00
tblFleetMix	MDV	0.13	0.00

tblFleetMix	MDV	0.13	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblLandUse	LotAcreage	24.68	3.95
tblOffRoadEquipment	UsageHours	6.00	4.70
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	8.00	6.20
tblOffRoadEquipment	UsageHours	7.00	5.40
tblOffRoadEquipment	UsageHours	8.00	6.20
tblProjectCharacteristics	CO2IntensityFactor	641.35	290
tblWoodstoves	NumberCatalytic	3.80	0.00
tblWoodstoves	NumberNoncatalytic	3.80	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1590	1.5397	1.1207	2.2400e-003	0.1930	0.0764	0.2694	0.0926	0.0712	0.1637	0.0000	198.0519	198.0519	0.0431	0.0000	199.1304
2021	0.8732	1.8647	1.7602	3.6900e-003	0.0720	0.0882	0.1602	0.0195	0.0828	0.1024	0.0000	326.5923	326.5923	0.0572	0.0000	328.0216
2022	0.2009	3.3900e-003	5.1100e-003	1.0000e-005	3.1000e-004	1.9000e-004	5.0000e-004	8.0000e-005	1.9000e-004	2.8000e-004	0.0000	0.8457	0.8457	4.0000e-005	0.0000	0.8468
Maximum	**0.8732**	**1.8647**	**1.7602**	**3.6900e-003**	**0.1930**	**0.0882**	**0.2694**	**0.0926**	**0.0828**	**0.1637**	**0.0000**	**326.5923**	**326.5923**	**0.0572**	**0.0000**	**328.0216**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1590	1.5397	1.1207	2.2400e-003	0.1930	0.0764	0.2694	0.0926	0.0712	0.1637	0.0000	198.0518	198.0518	0.0431	0.0000	199.1302
2021	0.8732	1.8647	1.7602	3.6900e-003	0.0720	0.0882	0.1602	0.0195	0.0828	0.1024	0.0000	326.5921	326.5921	0.0572	0.0000	328.0214
2022	0.2009	3.3900e-003	5.1100e-003	1.0000e-005	3.1000e-004	1.9000e-004	5.0000e-004	8.0000e-005	1.9000e-004	2.8000e-004	0.0000	0.8457	0.8457	4.0000e-005	0.0000	0.8468
Maximum	**0.8732**	**1.8647**	**1.7602**	**3.6900e-003**	**0.1930**	**0.0882**	**0.2694**	**0.0926**	**0.0828**	**0.1637**	**0.0000**	**326.5921**	**326.5921**	**0.0572**	**0.0000**	**328.0214**

Quarry Row - Placer-Sacramento 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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**7-1-2020**	**9-30-2020**	1.0505	1.0505
2	**10-1-2020**	**12-31-2020**	0.6431	0.6431
3	**1-1-2021**	**3-31-2021**	0.5716	0.5716
4	**4-1-2021**	**6-30-2021**	0.5765	0.5765
5	**7-1-2021**	**9-30-2021**	0.5828	0.5828
6	**10-1-2021**	**12-31-2021**	1.0049	1.0049
7	**1-1-2022**	**3-31-2022**	0.2432	0.2432
		Highest	1.0505	1.0505

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	0.6498	0.0582	0.5876	3.6000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	60.7832	60.7832	2.0400e-003	1.1000e-003	61.1613
Energy	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	189.1904	189.1904	0.0105	3.6700e-003	190.5445
Mobile	0.1720	0.2379	2.2871	6.6200e-003	0.7496	5.1000e-003	0.7547	0.1999	4.7200e-003	0.2046	0.0000	598.9180	598.9180	0.0199	0.0000	599.4142
Waste						0.0000	0.0000		0.0000	0.0000	15.8577	0.0000	15.8577	0.9372	0.0000	39.2867
Water						0.0000	0.0000		0.0000	0.0000	1.5710	4.9617	6.5327	0.1619	3.9100e-003	11.7448
Total	**0.8324**	**0.3866**	**2.9131**	**7.5600e-003**	**0.7496**	**0.0197**	**0.7694**	**0.1999**	**0.0193**	**0.2192**	**17.4286**	**853.8533**	**871.2819**	**1.1314**	**8.6800e-003**	**902.1515**

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	0.6498	0.0582	0.5876	3.6000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	60.7832	60.7832	2.0400e-003	1.1000e-003	61.1613
Energy	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	189.1904	189.1904	0.0105	3.6700e-003	190.5445
Mobile	0.1720	0.2379	2.2871	6.6200e-003	0.7496	5.1000e-003	0.7547	0.1999	4.7200e-003	0.2046	0.0000	598.9180	598.9180	0.0199	0.0000	599.4142
Waste						0.0000	0.0000		0.0000	0.0000	15.8577	0.0000	15.8577	0.9372	0.0000	39.2867
Water						0.0000	0.0000		0.0000	0.0000	1.5710	4.9617	6.5327	0.1619	3.9100e-003	11.7448
Total	**0.8324**	**0.3866**	**2.9131**	**7.5600e-003**	**0.7496**	**0.0197**	**0.7694**	**0.1999**	**0.0193**	**0.2192**	**17.4286**	**853.8533**	**871.2819**	**1.1314**	**8.6800e-003**	**902.1515**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	
2	Site Preparation	Site Preparation	7/29/2020	8/11/2020	5	10	
3	Grading	Grading	8/12/2020	9/8/2020	5	20	
4	Building Construction	Building Construction	9/9/2020	10/28/2021	5	297	
5	Paving	Paving	10/29/2021	12/3/2021	5	26	
6	Architectural Coating	Architectural Coating	12/4/2021	1/10/2022	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.98

Residential Indoor: 277,020; Residential Outdoor: 92,340; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 5,175 (Architectural Coating – sqft)

OffRoad Equipment

Quarry Row - Placer-Sacramento 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	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	5.40	231	0.29
Building Construction	Forklifts	3	6.20	89	0.20
Building Construction	Generator Sets	1	6.20	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	5.40	97	0.37
Building Construction	Welders	1	6.20	46	0.45
Paving	Pavers	2	6.20	130	0.42
Paving	Paving Equipment	2	6.20	132	0.36
Paving	Rollers	2	6.20	80	0.38
Architectural Coating	Air Compressors	1	4.70	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	65.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	22.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 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					
Fugitive Dust					7.0600e-003	0.0000	7.0600e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**7.0600e-003**	**0.0166**	**0.0237**	**1.0700e-003**	**0.0154**	**0.0165**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 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	2.6000e-004	9.0200e-003	1.4700e-003	3.0000e-005	5.5000e-004	3.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.5281	2.5281	8.0000e-005	0.0000	2.5302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	**7.8000e-004**	**9.3800e-003**	**5.3600e-003**	**4.0000e-005**	**1.7300e-003**	**4.0000e-005**	**1.7700e-003**	**4.6000e-004**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**3.5448**	**3.5448**	**1.1000e-004**	**0.0000**	**3.5475**

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					7.0600e-003	0.0000	7.0600e-003	1.0700e-003	0.0000	1.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**7.0600e-003**	**0.0166**	**0.0237**	**1.0700e-003**	**0.0154**	**0.0165**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 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	2.6000e-004	9.0200e-003	1.4700e-003	3.0000e-005	5.5000e-004	3.0000e-005	5.8000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.5281	2.5281	8.0000e-005	0.0000	2.5302
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	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	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	**7.8000e-004**	**9.3800e-003**	**5.3600e-003**	**4.0000e-005**	**1.7300e-003**	**4.0000e-005**	**1.7700e-003**	**4.6000e-004**	**4.0000e-005**	**5.0000e-004**	**0.0000**	**3.5448**	**3.5448**	**1.1000e-004**	**0.0000**	**3.5475**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 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	3.1000e-004	2.2000e-004	2.3400e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6100	0.6100	2.0000e-005	0.0000	0.6104
Total	**3.1000e-004**	**2.2000e-004**	**2.3400e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.1000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6100**	**0.6100**	**2.0000e-005**	**0.0000**	**0.6104**

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0204	0.2121	0.1076	1.9000e-004		0.0110	0.0110		0.0101	0.0101	0.0000	16.7153	16.7153	5.4100e-003	0.0000	16.8505
Total	**0.0204**	**0.2121**	**0.1076**	**1.9000e-004**	**0.0903**	**0.0110**	**0.1013**	**0.0497**	**0.0101**	**0.0598**	**0.0000**	**16.7153**	**16.7153**	**5.4100e-003**	**0.0000**	**16.8505**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.3400e-003	1.0000e-005	7.1000e-004	0.0000	7.1000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.6100	0.6100	2.0000e-005	0.0000	0.6104
Total	**3.1000e-004**	**2.2000e-004**	**2.3400e-003**	**1.0000e-005**	**7.1000e-004**	**0.0000**	**7.1000e-004**	**1.9000e-004**	**0.0000**	**1.9000e-004**	**0.0000**	**0.6100**	**0.6100**	**2.0000e-005**	**0.0000**	**0.6104**

3.4 Grading - 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					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0588	26.0588	8.4300e-003	0.0000	26.2694
Total	**0.0243**	**0.2639**	**0.1605**	**3.0000e-004**	**0.0655**	**0.0127**	**0.0783**	**0.0337**	**0.0117**	**0.0454**	**0.0000**	**26.0588**	**26.0588**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 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	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	**5.2000e-004**	**3.6000e-004**	**3.8900e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0167**	**1.0167**	**3.0000e-005**	**0.0000**	**1.0173**

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					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0243	0.2639	0.1605	3.0000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	26.0587	26.0587	8.4300e-003	0.0000	26.2694
Total	**0.0243**	**0.2639**	**0.1605**	**3.0000e-004**	**0.0655**	**0.0127**	**0.0783**	**0.0337**	**0.0117**	**0.0454**	**0.0000**	**26.0587**	**26.0587**	**8.4300e-003**	**0.0000**	**26.2694**

3.4 Grading - 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	5.2000e-004	3.6000e-004	3.8900e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	1.0167	1.0167	3.0000e-005	0.0000	1.0173
Total	**5.2000e-004**	**3.6000e-004**	**3.8900e-003**	**1.0000e-005**	**1.1800e-003**	**1.0000e-005**	**1.1900e-003**	**3.1000e-004**	**1.0000e-005**	**3.2000e-004**	**0.0000**	**1.0167**	**1.0167**	**3.0000e-005**	**0.0000**	**1.0173**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0672	0.6081	0.5342	8.5000e-004		0.0354	0.0354		0.0333	0.0333	0.0000	73.4242	73.4242	0.0179	0.0000	73.8717
Total	**0.0672**	**0.6081**	**0.5342**	**8.5000e-004**		**0.0354**	**0.0354**		**0.0333**	**0.0333**	**0.0000**	**73.4242**	**73.4242**	**0.0179**	**0.0000**	**73.8717**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.1073	0.0212	2.6000e-004	5.8900e-003	4.7000e-004	6.3600e-003	1.7000e-003	4.5000e-004	2.1500e-003	0.0000	24.8983	24.8983	1.2200e-003	0.0000	24.9288
Worker	9.0900e-003	6.3600e-003	0.0681	2.0000e-004	0.0206	1.4000e-004	0.0207	5.4800e-003	1.3000e-004	5.6100e-003	0.0000	17.7852	17.7852	4.4000e-004	0.0000	17.7962
Total	**0.0124**	**0.1137**	**0.0893**	**4.6000e-004**	**0.0265**	**6.1000e-004**	**0.0271**	**7.1800e-003**	**5.8000e-004**	**7.7600e-003**	**0.0000**	**42.6835**	**42.6835**	**1.6600e-003**	**0.0000**	**42.7250**

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	0.0672	0.6081	0.5342	8.5000e-004		0.0354	0.0354		0.0333	0.0333	0.0000	73.4242	73.4242	0.0179	0.0000	73.8716
Total	**0.0672**	**0.6081**	**0.5342**	**8.5000e-004**		**0.0354**	**0.0354**		**0.0333**	**0.0333**	**0.0000**	**73.4242**	**73.4242**	**0.0179**	**0.0000**	**73.8716**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.3200e-003	0.1073	0.0212	2.6000e-004	5.8900e-003	4.7000e-004	6.3600e-003	1.7000e-003	4.5000e-004	2.1500e-003	0.0000	24.8983	24.8983	1.2200e-003	0.0000	24.9288
Worker	9.0900e-003	6.3600e-003	0.0681	2.0000e-004	0.0206	1.4000e-004	0.0207	5.4800e-003	1.3000e-004	5.6100e-003	0.0000	17.7852	17.7852	4.4000e-004	0.0000	17.7962
Total	**0.0124**	**0.1137**	**0.0893**	**4.6000e-004**	**0.0265**	**6.1000e-004**	**0.0271**	**7.1800e-003**	**5.8000e-004**	**7.7600e-003**	**0.0000**	**42.6835**	**42.6835**	**1.6600e-003**	**0.0000**	**42.7250**

3.5 Building Construction - 2021

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	0.1580	1.4488	1.3780	2.2400e-003		0.0797	0.0797		0.0749	0.0749	0.0000	192.5374	192.5374	0.0464	0.0000	193.6978
Total	**0.1580**	**1.4488**	**1.3780**	**2.2400e-003**		**0.0797**	**0.0797**		**0.0749**	**0.0749**	**0.0000**	**192.5374**	**192.5374**	**0.0464**	**0.0000**	**193.6978**

3.5 Building Construction - 2021

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	7.3000e-003	0.2582	0.0493	6.8000e-004	0.0154	5.9000e-004	0.0160	4.4700e-003	5.6000e-004	5.0300e-003	0.0000	64.7645	64.7645	3.0200e-003	0.0000	64.8400
Worker	0.0222	0.0149	0.1633	5.0000e-004	0.0540	3.5000e-004	0.0544	0.0144	3.2000e-004	0.0147	0.0000	44.9913	44.9913	1.0300e-003	0.0000	45.0170
Total	**0.0295**	**0.2731**	**0.2127**	**1.1800e-003**	**0.0695**	**9.4000e-004**	**0.0704**	**0.0189**	**8.8000e-004**	**0.0197**	**0.0000**	**109.7559**	**109.7559**	**4.0500e-003**	**0.0000**	**109.8570**

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	0.1580	1.4488	1.3780	2.2400e-003		0.0797	0.0797		0.0749	0.0749	0.0000	192.5372	192.5372	0.0464	0.0000	193.6976
Total	**0.1580**	**1.4488**	**1.3780**	**2.2400e-003**		**0.0797**	**0.0797**		**0.0749**	**0.0749**	**0.0000**	**192.5372**	**192.5372**	**0.0464**	**0.0000**	**193.6976**

3.5 Building Construction - 2021

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	7.3000e-003	0.2582	0.0493	6.8000e-004	0.0154	5.9000e-004	0.0160	4.4700e-003	5.6000e-004	5.0300e-003	0.0000	64.7645	64.7645	3.0200e-003	0.0000	64.8400
Worker	0.0222	0.0149	0.1633	5.0000e-004	0.0540	3.5000e-004	0.0544	0.0144	3.2000e-004	0.0147	0.0000	44.9913	44.9913	1.0300e-003	0.0000	45.0170
Total	**0.0295**	**0.2731**	**0.2127**	**1.1800e-003**	**0.0695**	**9.4000e-004**	**0.0704**	**0.0189**	**8.8000e-004**	**0.0197**	**0.0000**	**109.7559**	**109.7559**	**4.0500e-003**	**0.0000**	**109.8570**

3.6 Paving - 2021

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	0.0127	0.1302	0.1476	2.3000e-004		6.8300e-003	6.8300e-003		6.2800e-003	6.2800e-003	0.0000	20.1737	20.1737	6.5200e-003	0.0000	20.3368
Paving	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.1302**	**0.1476**	**2.3000e-004**		**6.8300e-003**	**6.8300e-003**		**6.2800e-003**	**6.2800e-003**	**0.0000**	**20.1737**	**20.1737**	**6.5200e-003**	**0.0000**	**20.3368**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.2000e-004	4.6300e-003	1.0000e-005	1.5300e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2752	1.2752	3.0000e-005	0.0000	1.2759
Total	**6.3000e-004**	**4.2000e-004**	**4.6300e-003**	**1.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5400e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2752**	**1.2752**	**3.0000e-005**	**0.0000**	**1.2759**

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	0.0127	0.1302	0.1476	2.3000e-004		6.8300e-003	6.8300e-003		6.2800e-003	6.2800e-003	0.0000	20.1736	20.1736	6.5200e-003	0.0000	20.3368
Paving	2.5900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0152**	**0.1302**	**0.1476**	**2.3000e-004**		**6.8300e-003**	**6.8300e-003**		**6.2800e-003**	**6.2800e-003**	**0.0000**	**20.1736**	**20.1736**	**6.5200e-003**	**0.0000**	**20.3368**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	4.2000e-004	4.6300e-003	1.0000e-005	1.5300e-003	1.0000e-005	1.5400e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2752	1.2752	3.0000e-005	0.0000	1.2759
Total	**6.3000e-004**	**4.2000e-004**	**4.6300e-003**	**1.0000e-005**	**1.5300e-003**	**1.0000e-005**	**1.5400e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2752**	**1.2752**	**3.0000e-005**	**0.0000**	**1.2759**

3.7 Architectural Coating - 2021

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	0.6677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0120	0.0142	2.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.0001	2.0001	1.4000e-004	0.0000	2.0035
Total	**0.6694**	**0.0120**	**0.0142**	**2.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.0001**	**2.0001**	**1.4000e-004**	**0.0000**	**2.0035**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	3.0900e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8501	0.8501	2.0000e-005	0.0000	0.8506
Total	**4.2000e-004**	**2.8000e-004**	**3.0900e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8501**	**0.8501**	**2.0000e-005**	**0.0000**	**0.8506**

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	0.6677					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.7100e-003	0.0120	0.0142	2.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004	0.0000	2.0001	2.0001	1.4000e-004	0.0000	2.0035
Total	**0.6694**	**0.0120**	**0.0142**	**2.0000e-005**		**7.4000e-004**	**7.4000e-004**		**7.4000e-004**	**7.4000e-004**	**0.0000**	**2.0001**	**2.0001**	**1.4000e-004**	**0.0000**	**2.0035**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.8000e-004	3.0900e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0300e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	0.8501	0.8501	2.0000e-005	0.0000	0.8506
Total	**4.2000e-004**	**2.8000e-004**	**3.0900e-003**	**1.0000e-005**	**1.0200e-003**	**1.0000e-005**	**1.0300e-003**	**2.7000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8501**	**0.8501**	**2.0000e-005**	**0.0000**	**0.8506**

3.7 Architectural Coating - 2022

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	0.2003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.3100e-003	4.2600e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.6000	0.6000	4.0000e-005	0.0000	0.6010
Total	**0.2008**	**3.3100e-003**	**4.2600e-003**	**1.0000e-005**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.6000**	**0.6000**	**4.0000e-005**	**0.0000**	**0.6010**

3.7 Architectural Coating - 2022

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	1.2000e-004	8.0000e-005	8.5000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2457	0.2457	1.0000e-005	0.0000	0.2458
Total	**1.2000e-004**	**8.0000e-005**	**8.5000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2457**	**0.2457**	**1.0000e-005**	**0.0000**	**0.2458**

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	0.2003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.8000e-004	3.3100e-003	4.2600e-003	1.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	0.6000	0.6000	4.0000e-005	0.0000	0.6010
Total	**0.2008**	**3.3100e-003**	**4.2600e-003**	**1.0000e-005**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**0.6000**	**0.6000**	**4.0000e-005**	**0.0000**	**0.6010**

3.7 Architectural Coating - 2022

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	1.2000e-004	8.0000e-005	8.5000e-004	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2457	0.2457	1.0000e-005	0.0000	0.2458
Total	**1.2000e-004**	**8.0000e-005**	**8.5000e-004**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2457**	**0.2457**	**1.0000e-005**	**0.0000**	**0.2458**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1720	0.2379	2.2871	6.6200e-003	0.7496	5.1000e-003	0.7547	0.1999	4.7200e-003	0.2046	0.0000	598.9180	598.9180	0.0199	0.0000	599.4142
Unmitigated	0.1720	0.2379	2.2871	6.6200e-003	0.7496	5.1000e-003	0.7547	0.1999	4.7200e-003	0.2046	0.0000	598.9180	598.9180	0.0199	0.0000	599.4142

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	723.52	753.16	655.12	2,056,692	2,056,692
Total	723.52	753.16	655.12	2,056,692	2,056,692

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	42.60	21.00	36.40	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232
Single Family Housing	0.728895	0.040252	0.220236	0.000000	0.000000	0.000000	0.000000	0.000000	0.001446	0.001205	0.005961	0.000773	0.001232

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.4140	84.4140	8.4400e-003	1.7500e-003	85.1454
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	84.4140	84.4140	8.4400e-003	1.7500e-003	85.1454
NaturalGas Mitigated	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	104.7765	104.7765	2.0100e-003	1.9200e-003	105.3991
NaturalGas Unmitigated	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	104.7765	104.7765	2.0100e-003	1.9200e-003	105.3991

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					
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
Single Family Housing	1.96344e+006	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	104.7765	104.7765	2.0100e-003	1.9200e-003	105.3991
Total		**0.0106**	**0.0905**	**0.0385**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**	**0.0000**	**104.7765**	**104.7765**	**2.0100e-003**	**1.9200e-003**	**105.3991**

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					
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
Single Family Housing	1.96344e+006	0.0106	0.0905	0.0385	5.8000e-004		7.3100e-003	7.3100e-003		7.3100e-003	7.3100e-003	0.0000	104.7765	104.7765	2.0100e-003	1.9200e-003	105.3991
Total		**0.0106**	**0.0905**	**0.0385**	**5.8000e-004**		**7.3100e-003**	**7.3100e-003**		**7.3100e-003**	**7.3100e-003**	**0.0000**	**104.7765**	**104.7765**	**2.0100e-003**	**1.9200e-003**	**105.3991**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	641727	84.4140	8.4400e-003	1.7500e-003	85.1454
Total		**84.4140**	**8.4400e-003**	**1.7500e-003**	**85.1454**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	641727	84.4140	8.4400e-003	1.7500e-003	85.1454
Total		**84.4140**	**8.4400e-003**	**1.7500e-003**	**85.1454**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6498	0.0582	0.5876	3.6000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	60.7832	60.7832	2.0400e-003	1.1000e-003	61.1613
Unmitigated	0.6498	0.0582	0.5876	3.6000e-004		7.3000e-003	7.3000e-003		7.3000e-003	7.3000e-003	0.0000	60.7832	60.7832	2.0400e-003	1.1000e-003	61.1613

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	0.0868					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.0500e-003	0.0517	0.0220	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003	0.0000	59.8614	59.8614	1.1500e-003	1.1000e-003	60.2171
Landscaping	0.0171	6.5300e-003	0.5656	3.0000e-005		3.1200e-003	3.1200e-003		3.1200e-003	3.1200e-003	0.0000	0.9218	0.9218	8.9000e-004	0.0000	0.9442
Total	**0.6498**	**0.0582**	**0.5876**	**3.6000e-004**		**7.3000e-003**	**7.3000e-003**		**7.3000e-003**	**7.3000e-003**	**0.0000**	**60.7832**	**60.7832**	**2.0400e-003**	**1.1000e-003**	**61.1613**

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	0.0868					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5399					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	6.0500e-003	0.0517	0.0220	3.3000e-004		4.1800e-003	4.1800e-003		4.1800e-003	4.1800e-003	0.0000	59.8614	59.8614	1.1500e-003	1.1000e-003	60.2171
Landscaping	0.0171	6.5300e-003	0.5656	3.0000e-005		3.1200e-003	3.1200e-003		3.1200e-003	3.1200e-003	0.0000	0.9218	0.9218	8.9000e-004	0.0000	0.9442
Total	**0.6498**	**0.0582**	**0.5876**	**3.6000e-004**		**7.3000e-003**	**7.3000e-003**		**7.3000e-003**	**7.3000e-003**	**0.0000**	**60.7832**	**60.7832**	**2.0400e-003**	**1.1000e-003**	**61.1613**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	6.5327	0.1619	3.9100e-003	11.7448
Unmitigated	6.5327	0.1619	3.9100e-003	11.7448

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.95171 / 3.12173	6.5327	0.1619	3.9100e-003	11.7448
Total		**6.5327**	**0.1619**	**3.9100e-003**	**11.7448**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.95171 / 3.12173	6.5327	0.1619	3.9100e-003	11.7448
Total		**6.5327**	**0.1619**	**3.9100e-003**	**11.7448**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15.8577	0.9372	0.0000	39.2867
Unmitigated	15.8577	0.9372	0.0000	39.2867

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	78.12	15.8577	0.9372	0.0000	39.2867
Total		**15.8577**	**0.9372**	**0.0000**	**39.2867**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	78.12	15.8577	0.9372	0.0000	39.2867
Total		**15.8577**	**0.9372**	**0.0000**	**39.2867**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B: TRAFFIC

KD Anderson & Associates, Inc.
Transportation Engineers

July 24, 2019

Mr. David Mohlenbrok, Director
City of Rocklin Community Development Department
3970 Rocklin Road
Rocklin, CA 95677

RE: QUARRY ROW SUBDIVISION: TRAFFIC STUDY UPDATE

This letter is an addendum to our January 2017 traffic impact analysis for the **Quarry Row Subdivision** in the City of Rocklin, California. That report identified the impacts of a 64 unit subdivision, which has subsequently been increased to 76 dwellings units (refer to attached Site Plan). The analysis summary which follows compared the impacts of the original and proposed projects to confirm that no new impacts will result and that no additional mitigations are required as a result of the project change.

Project Characteristics

Trip Generation. As noted in Table 1, the new project will generate 115 more daily trips, with 9 more trips in the a.m. peak hour and 12 more trips in the p.m. peak hour.

TABLE 1
TRIP GENERATION COMPARISON

Description	Quantity	Trips						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Original Project								
Single Family Residential	64 dwellings	609	12	36	48	41	23	64
Proposed Project								
Single Family Residential	76 dwellings	724	14	43	57	48	28	76
Net Difference		115	2	7	9	7	5	12

Trip Assignment. Project trips were again assigned to the local street system based on the regional distribution assumptions identified previously. Figure 1 identifies the assignment of project trips through the study intersections and at the project's access intersections.

Existing Plus Project Traffic Conditions and Levels of Service

Figure 2 superimposes project trips onto the current background traffic volumes to create the "Existing plus Project" condition. Table 2 compares the "Existing plus Project" Levels of Service.

As shown in Table 2, because the amount of additional traffic associated with the change in the project is relatively small, the new plan does not appreciable increase the length of delays occurring at study intersections, and the project still does not result in any change to the peak hour Level of Service at any location. Overall Levels of Service at each intersection will remain LOS A, which is within the adopted minimum standard (i.e., LOS C or better). Thus, the project's impact isn't significant measured in terms of intersection Level of Service.

Project Impacts to Alternative Transportation Modes

Development of the project may incrementally contribute to the demand for facilities to serve pedestrians, cyclists and transit riders in this area of Rocklin. These demands and project site improvements are unchanged. No additional impacts would result.

Safety Issues

Project impacts relating to safety issues for vehicular traffic were reviewed. The change in project trip generation does not change the original impacts or mitigation requirements.

Creating a westbound left turn lane for the project access will still require modifying the existing raised landscaped median on Pacific Street. The recommended solution to eliminate the median and to stripe a short left turn into the project that then extends to the existing TWLT lane further east remains valid.

BASELINE (EPAP) PLUS PROJECT IMPACTS

The "Baseline" traffic impacts of the revised Quarry Row Subdivision have been considered within the context of traffic conditions in this area of Rocklin assuming occupancy of other approved but as yet unconstructed projects under an "Existing plus Approved Projects" (EPAP) condition. The list of approved projects at the time of the original NOP has again been employed.

EPAP Plus Project Traffic Conditions and Levels of Service

Figure 3 presents "EPAP plus Project" traffic volumes with the 76 unit project.

As shown in Table 3, because the additional traffic associated with the change in project does not appreciably increase the length of delays at study intersections, and the project still does not result in any change to the peak hour Level of Service at any location. Overall Levels of Service at each intersection will remain LOS A, which is within the adopted minimum standard (i.e., LOS C or better). Thus, the project's impact isn't significant measured in terms of intersection Level of Service.

LONG TERM CUMULATIVE CONDITIONS

The long term background traffic conditions created at the time of the project's NOP based on the City of Rocklin's General Plan traffic model are reused.

Cumulative Traffic Volumes and Levels of Service

Traffic Volume Forecasts. Figure 4 presents the Cumulative plus Project traffic volume forecasts with the revised project.

Cumulative Level of Service. Table 4 compares Cumulative plus Project a.m. and p.m. peak hour Levels of Service at study intersections with the original and the proposed project. As indicated, all intersections will operate with Levels of Service that satisfy the City of Rocklin's minimum LOS C standard with completion of the project, and the revised project's impacts are not significant.

Thank you for your attention to this information.

Please feel free to contact me if you have any questions.

Sincerely Yours,

KD Anderson & Associates, Inc.

Kenneth D. Anderson, P.E.
President

Attachments: Tables 2-4, Figures 1-5, LOS worksheets

KDA

TABLE 2
EXISTING PLUS PROJECT
PEAK HOUR INTERSECTION LEVELS OF SERVICE

Intersection	Control	Time Period											
		AM Peak Hour (7:00 to 9:00 a.m.)						PM Peak Hour (4:00 to 6:00 p.m.)					
		Existing plus 64 du's			Existing plus 76 du's			Existing plus 64 du's			Existing plus 76 du's		
		LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)
Pacific Street / Midas Avenue	Signal	A	0.383	-	A	0.384	-	A	0.500	-	A	0.501	-
Pacific Street / Grove Street	NB Stop												
(overall)		(A)	-	(1.2)	(A)	-	(1.2)	(A)	-	(0.8)	(A)	-	(0.8)
Northbound left+right turn		B		12.7	B		12.9	B		12.9	B		13.1
Pacific Street / Yankee Hill Road	SB Stop												
(overall)		(A)	-	(0.8)	(A)	-	(0.8)	(A)	-	(0.9)	(A)	-	(0.9)
SB left+right turn		B		10.7	B		10.7	C		12.4	C		12.4
Pacific Street / Train Depot Comm	SB/NB Stop												
(overall)		(A)		(0.5)	(A)		(0.5)	(A)		(0.2)	(A)		(0.2)
SB left+right turn		B	-	12.5	B	-	12.5	A	-	8.9	A	-	8.9
NB right turn		B		10.1	B		10.1	B		10.3	B		10.3
Pacific Street / Americana Way / Sierra Meadows Drive	Signal	A	0.314	-	A	0.314	-	A	0.395	-	A	0.396	-
Grove Street / Access	WB Stop												
(overall)		(A)	-	(1.9)	(A)	-	(2.2)	(A)	-	(1.5)	(A)	-	(1.7)
WB left+right turn		A		8.9	A		8.9	A		8.8	A		8.8
Grove Street / Cedar Street	All-Way Stop	A	-	7.9	A	-	7.9	A	-	7.3	A	-	7.3
Rocklin Road / Meyers Street	Roundabout	A	-	7.7	A	-	7.7	A	-	7.4	A	-	7.4

Bold indicates conditions in excess of adopted minimum LOS standard. Note: Only PM Peak Hour is significant. (Overall LOS) is the significance criteria at un-signalized intersections controlled by side street stop signs.

KDA

TABLE 3
EXISTING PLUS APPROVED PROJECTS PLUS PROJECT
PEAK HOUR INTERSECTION LEVELS OF SERVICE

Intersection	Control	Time Period											
		AM Peak Hour (7:00 to 9:00 a.m.)						PM Peak Hour (4:00 to 6:00 p.m.)					
		EPAP plus 64 du's			EPAP plus 76 du's			Existing plus 64 du's			EPAP plus 76 du's		
		LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)
Pacific Street / Midas Avenue	Signal	A	0.447	-	A	0.448	-	A	0.564	-	A	0.596	-
Pacific Street / Grove Street	NB Stop												
(overall)		(A)	-	(1.1)	(A)	-	(1.1)	(A)	-	(0.8)	(A)	-	(0.8)
Northbound left+right turn		B		13.5	B		13.7	B		14.5	B		14.7
Pacific Street / Yankee Hill Road	SB Stop												
(overall)		(A)	-	(0.7)	(A)	-	(0.7)	(A)	-	(0.8)	(A)	-	(0.8)
SB left+right turn		B		11.4	B		11.4	B		13.7	C		13.7
Pacific Street / Train Depot Comm	NB/SB stop												
(overall)		(A)	-	(0.4)	(A)	-	(0.4)	(A)	-	(0.1)	(A)	-	(0.2)
SB left+right turn		B		14.4	B		14.4	A		9.4	A		9.4
NB right turn		C		10.3	C		10.3	C		11.0	C		11.0
Pacific Street / Americana Way / Sierra Meadows Drive	Signal	A	0.376	-	A	0.376	-	A	0.447	-	A	0.448	-
Grove Street / Access	WB Stop												
(overall)		(A)	-	(1.9)	(A)	-	(2.2)	(A)	-	(1.5)	(A)	-	(1.6)
WB left+right turn		A		8.9	A		8.9	A		8.8	A		8.9
Grove Street / Cedar Street	All-Way Stop	A	-	8.0	A	-	8.0	A	-	7.3	A	-	7.3
Rocklin Road / Meyers Street	Roundabout	A	-	7.8	A	-	7.8	B	-	10.1	B	-	10.1

Bold indicates conditions in excess of adopted minimum LOS standard. Note: Only PM Peak Hour is significant. (Overall LOS) is the significance criteria at un-signalized intersections controlled by side street stop signs.

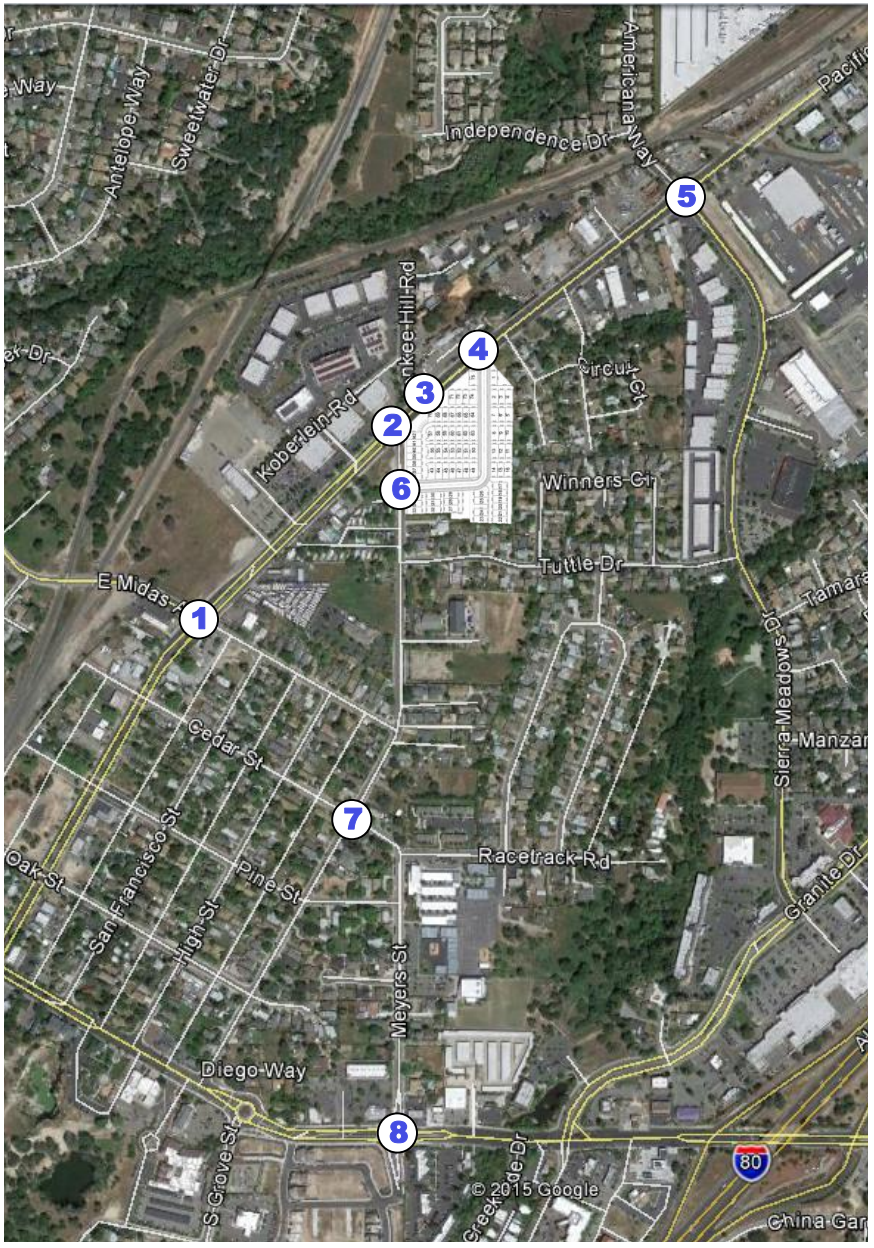
KDA

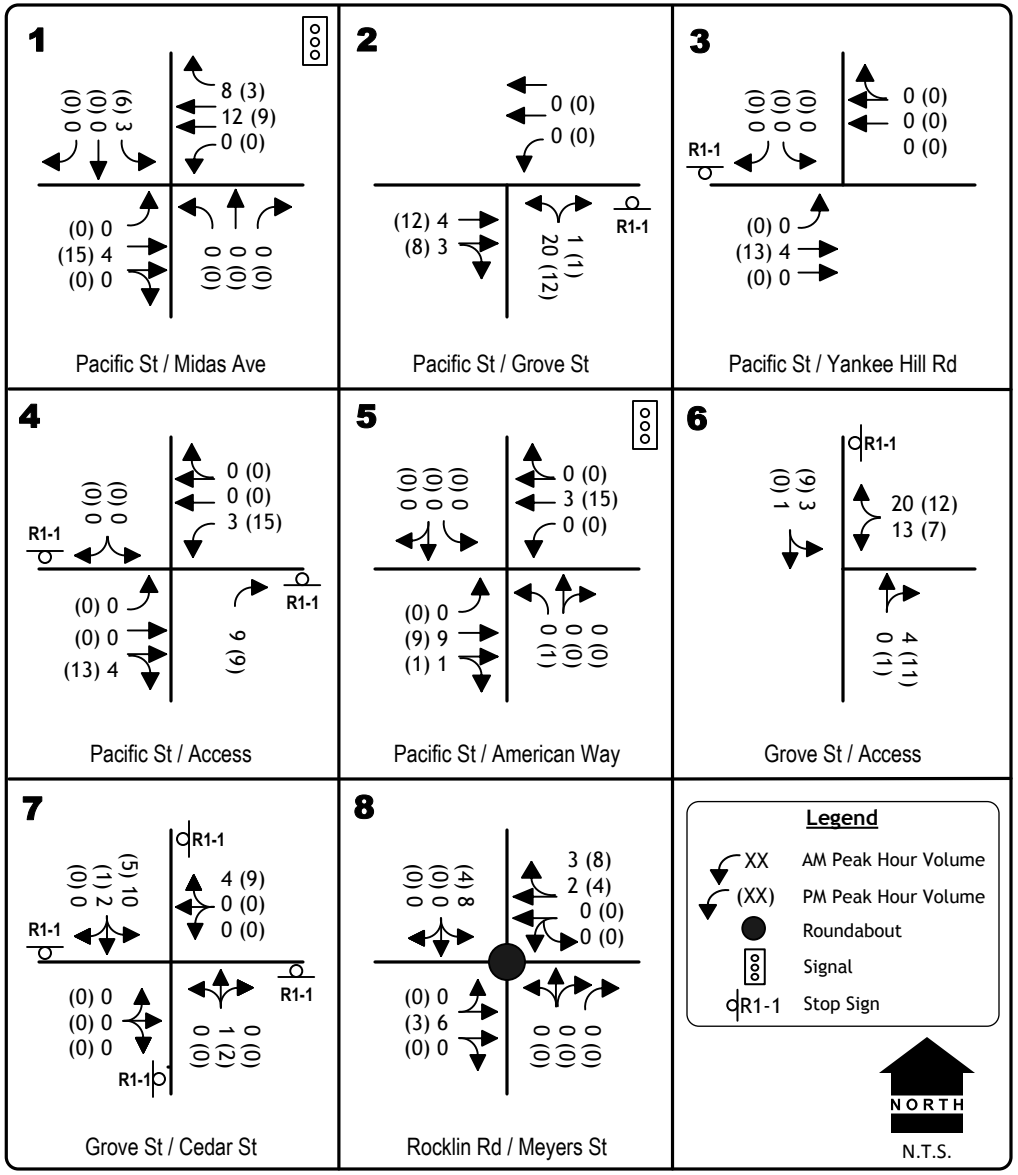
TABLE 4
CUMULATIVE PLUS PROJECT
PEAK HOUR INTERSECTION LEVELS OF SERVICE

Intersection	Control	Time Period											
		AM Peak Hour (7:00 to 9:00 a.m.)						PM Peak Hour (4:00 to 6:00 p.m.)					
		Cumulative w/ 64 du's			Cumulative w/ 76 du's			Cumulative w/ 64 du's			Cumulative w/76 du's		
		LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)	LOS	V / C	Average Delay (sec/veh)
Pacific Street / Midas Avenue	Signal	B	0.637	-	B	0.638	-	C	0.731	-	C	0.733	-
Pacific Street / Grove Street	NB Stop												
(overall)		(A)	-	(1.0)	(A)	-	(1.0)	(A)	-	(1.0)	(A)	-	(1.0)
Northbound left+right turn		D		18.3	C		18.8	D		32.0	D		33.2
Pacific Street / Yankee Hill Road	SB Stop												
(overall)		(A)	-	(0.6)	(A)	-	(0.6)	(A)	-	(0.7)	(A)	-	(0.7)
SB left+right turn		B		14.3	B		14.3	C		19.7	C		19.7
Pacific Street / Train Depot Comm	NB/SB stop												
(overall)		(A)	-	(0.4)	(A)	-	(0.4)	(A)	-	(0.1)	(A)	-	(0.1)
SB left+right turn		D		25.1	D		25.1	B		11.2	B		11.2
NB left+right turn		B		11.7	B		11.7	C		15.4	C		15.4
Pacific Street / Americana Way / Sierra Meadows Drive	Signal	A	0.507	-	A	0.507	-	C	0.755	-	C	0.756	-
Grove Street / Access	WB Stop												
(overall)		(A)	-	(1.7)	(A)	-	(2.0)	(A)	-	(1.4)	(A)	-	(1.5)
WB left+right turn		A		8.9	A		8.9	A		8.9	A		8.9
Grove Street / Cedar Street	All-Way Stop	A	-	8.7	A	-	8.7	A	-	8.8	A	-	8.8
Rocklin Road / Meyers Street	Roundabout	C	-	19.0	C	-	19.0	c	-	22.5	C	-	22.5

Bold indicates conditions in excess of adopted minimum LOS standard. Note: Only PM Peak Hour is significant. (Overall LOS) is the significance criteria at un-signalized intersections controlled by side street stop signs.

KDA



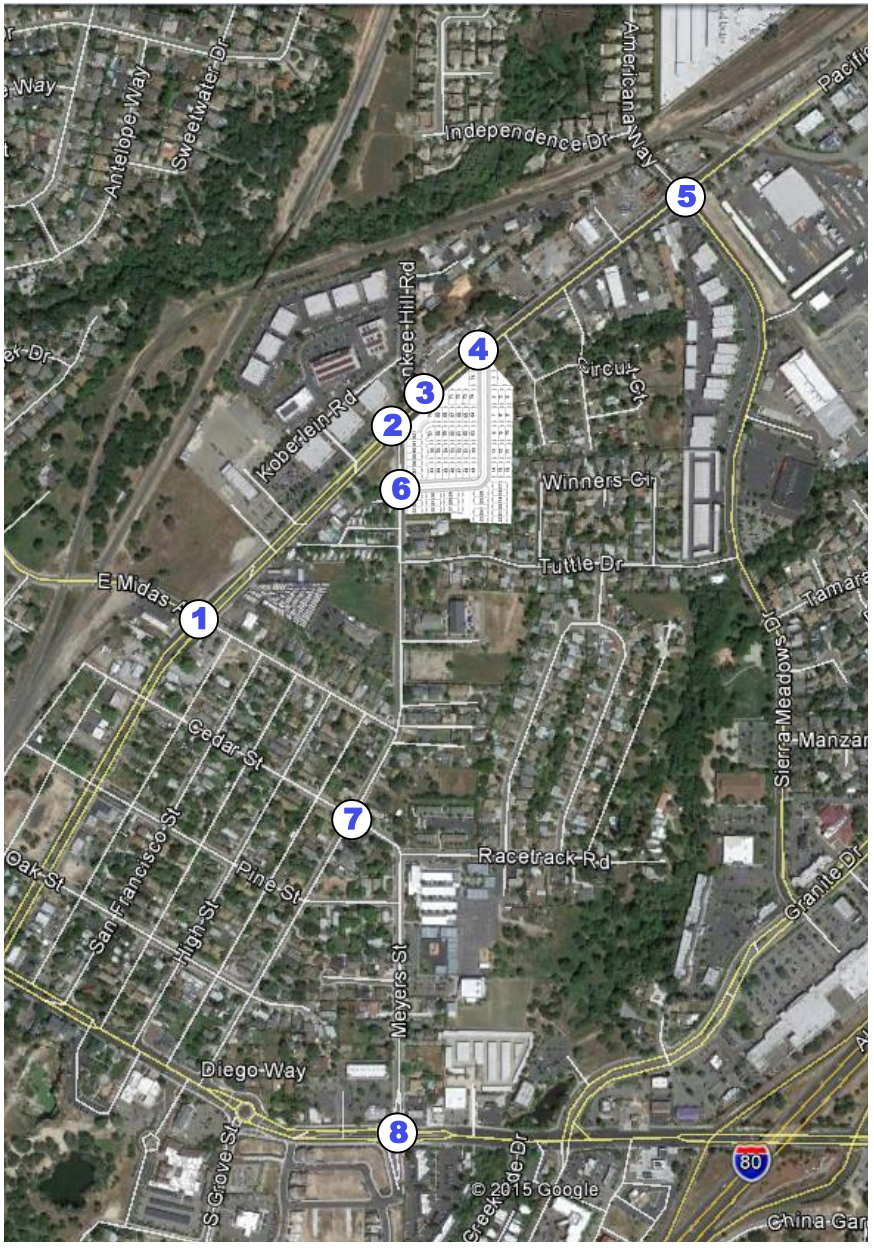


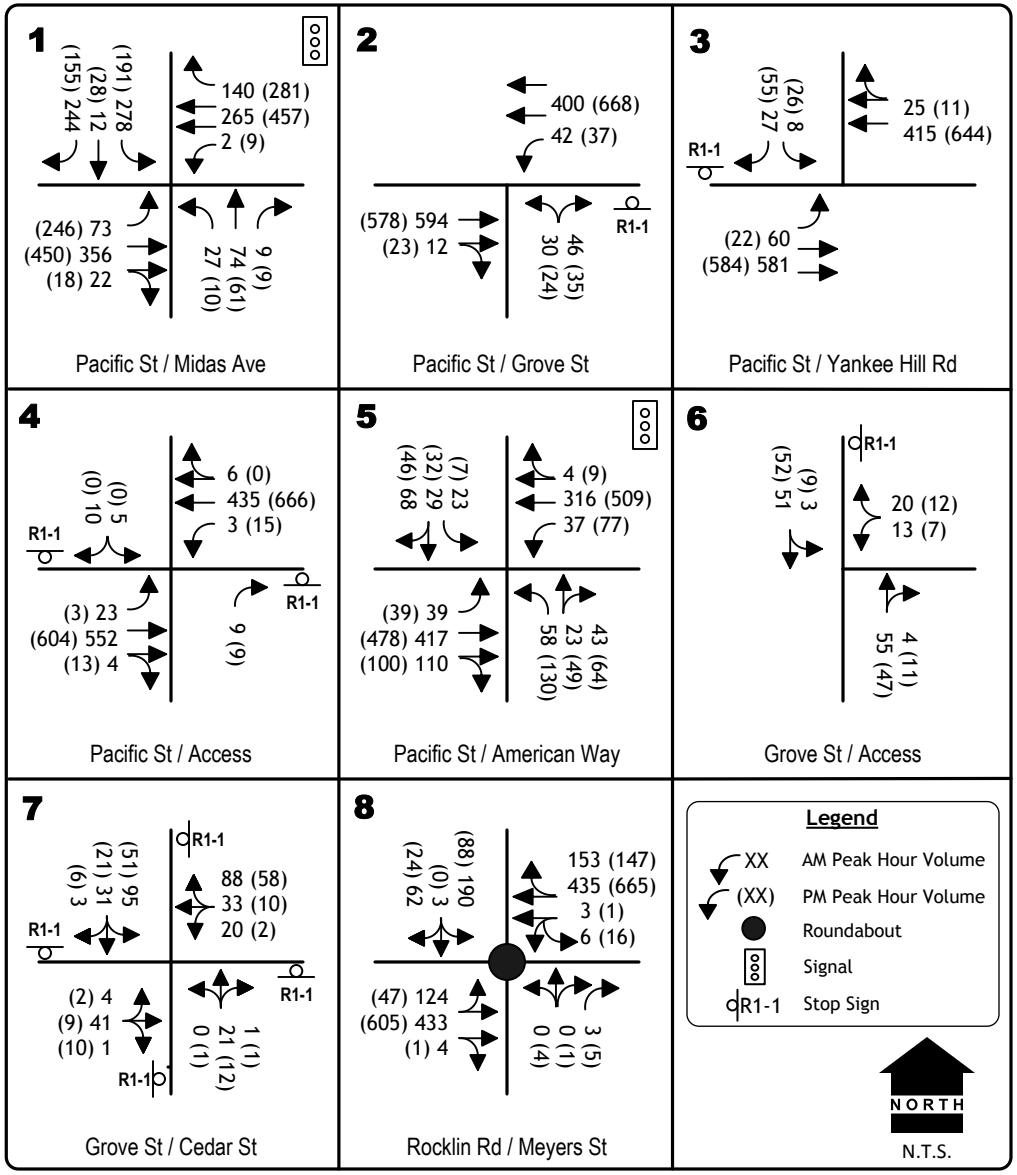
PROJECT ONLY TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

7571-01 RA 7/24/2019

figure 1



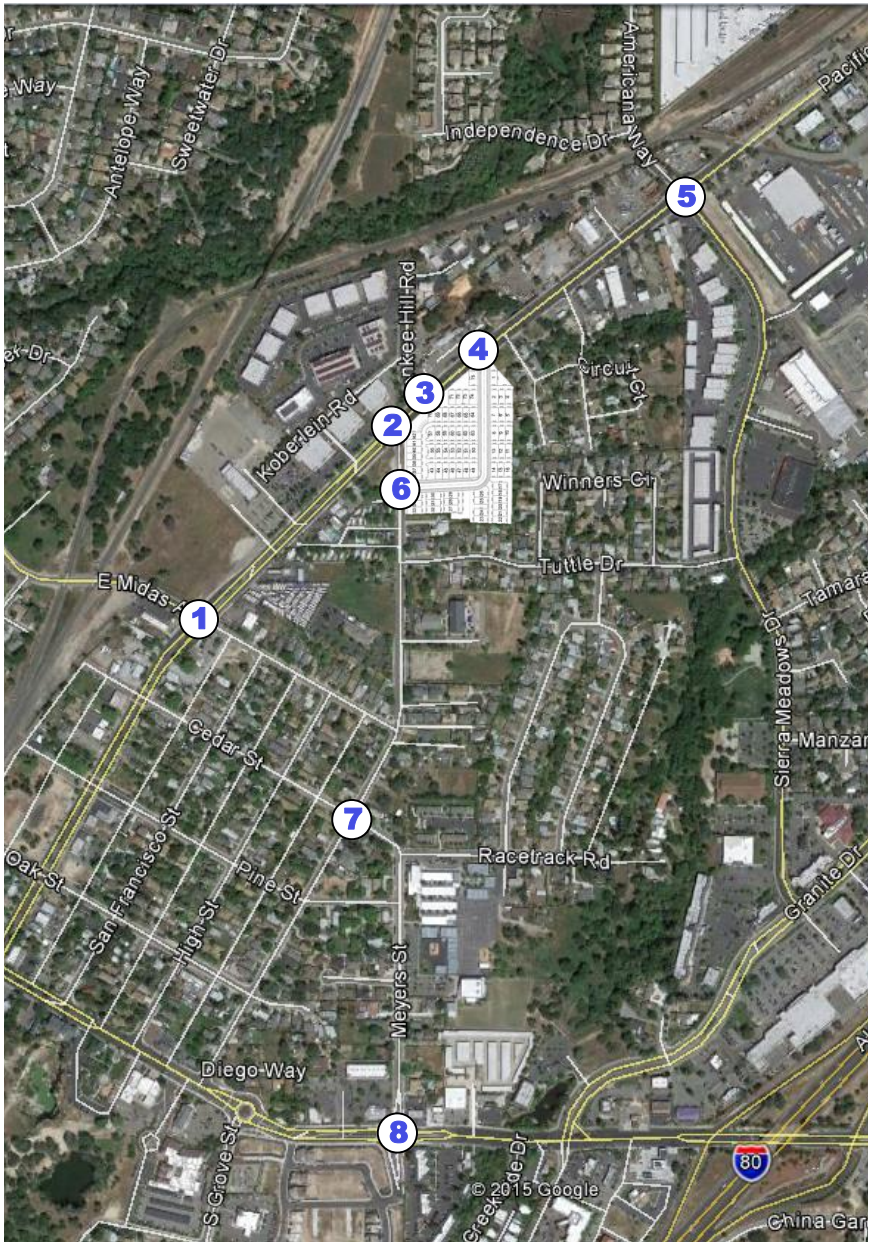


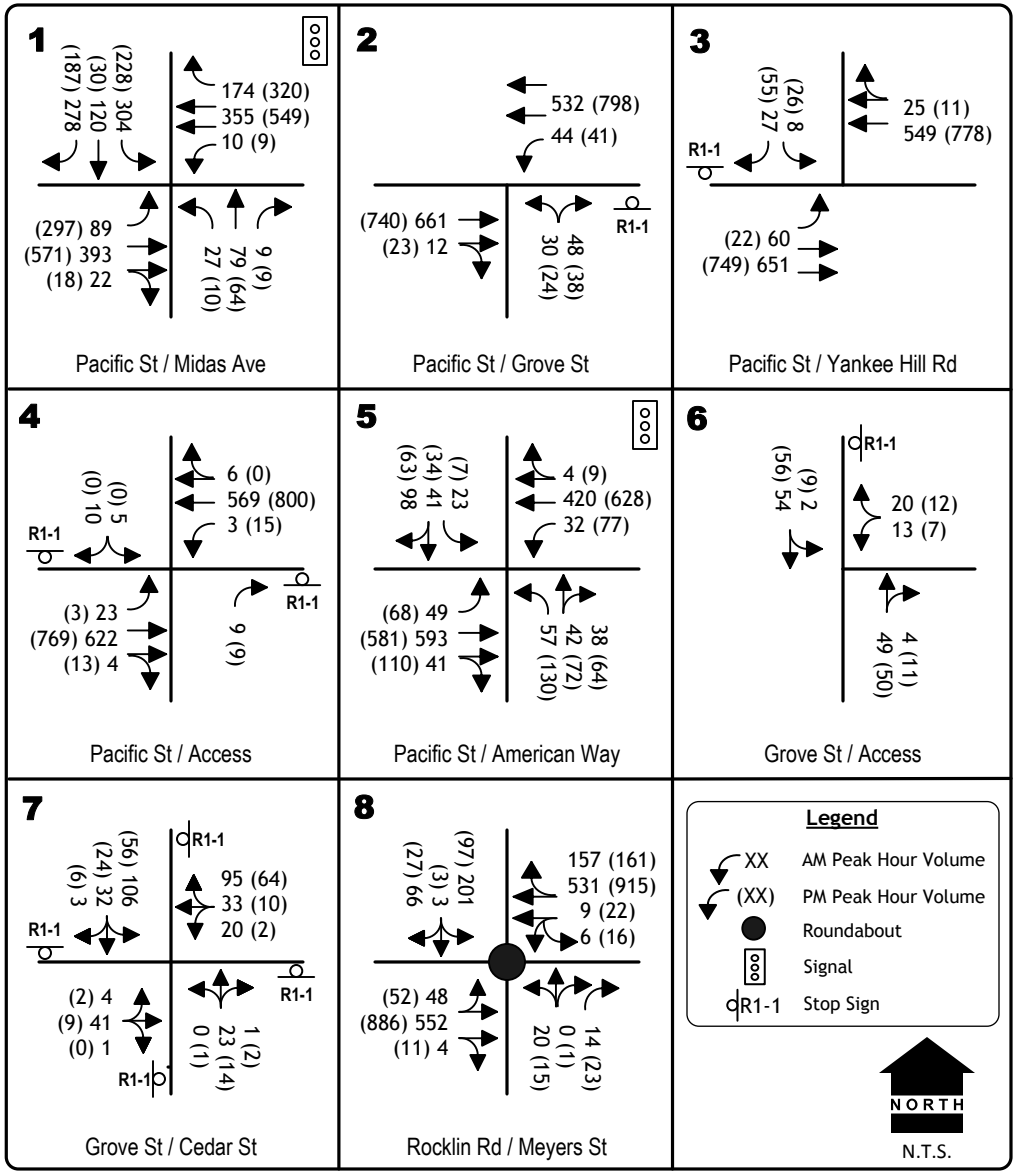
EXISTING PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

7571-01 RA 7/24/2019

figure 2



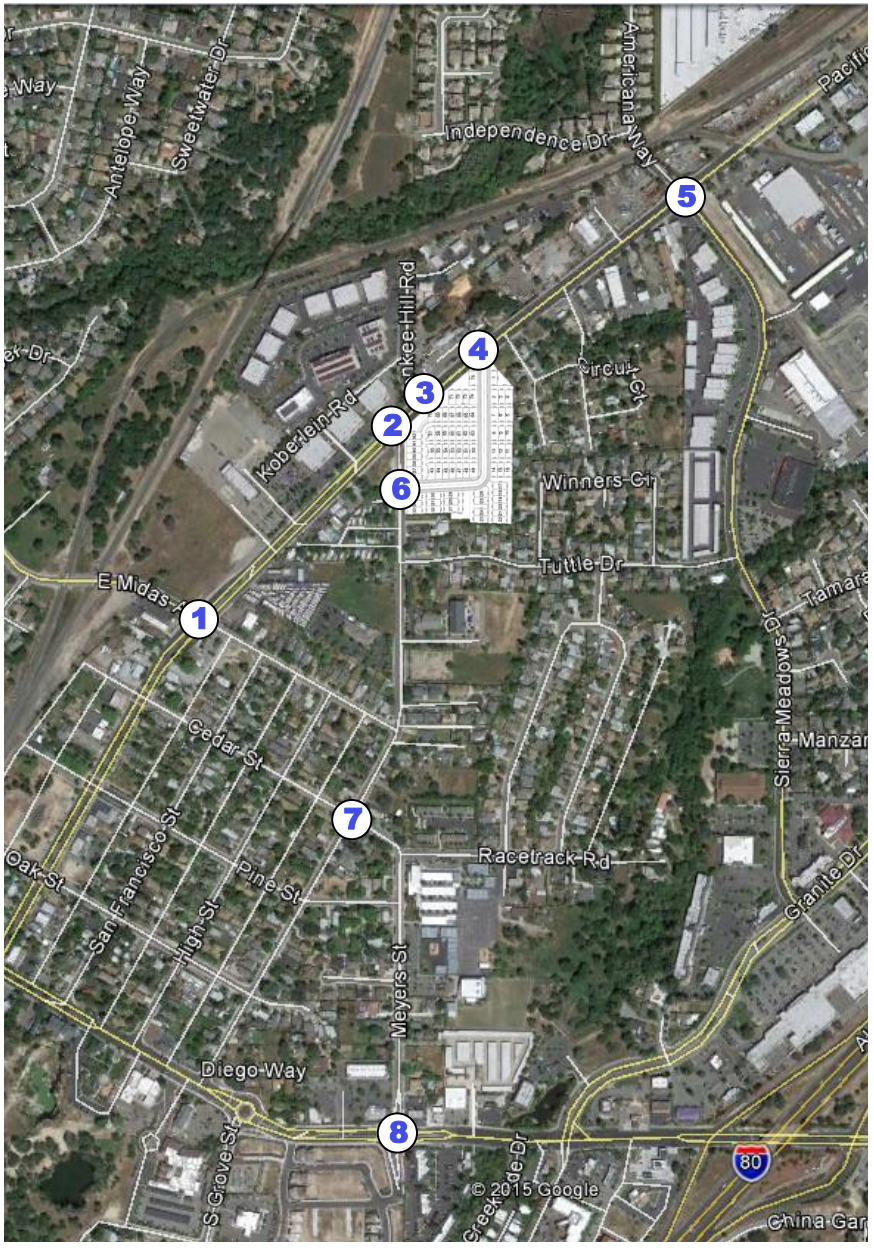


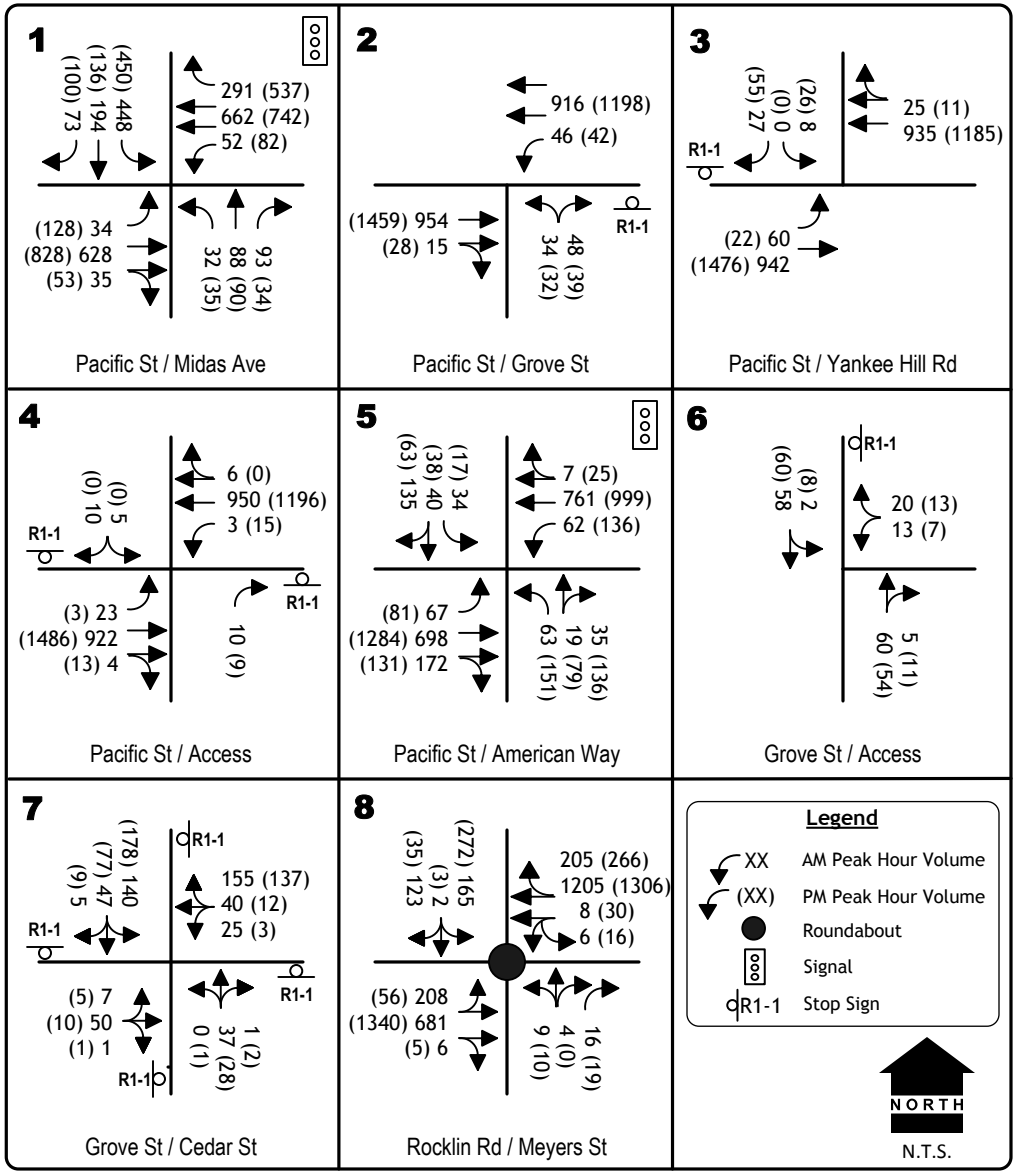
EPAP PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

KD Anderson & Associates, Inc.
Transportation Engineers

7571-01 RA 7/24/2019

figure 3





CUMULATIVE PLUS PROJECT
TRAFFIC VOLUMES AND LANE CONFIGURATIONS

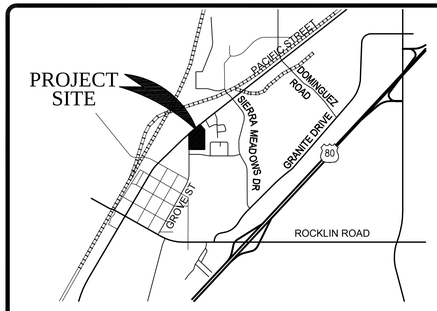
KD Anderson & Associates, Inc.
Transportation Engineers

7571-01 RA 7/24/2019

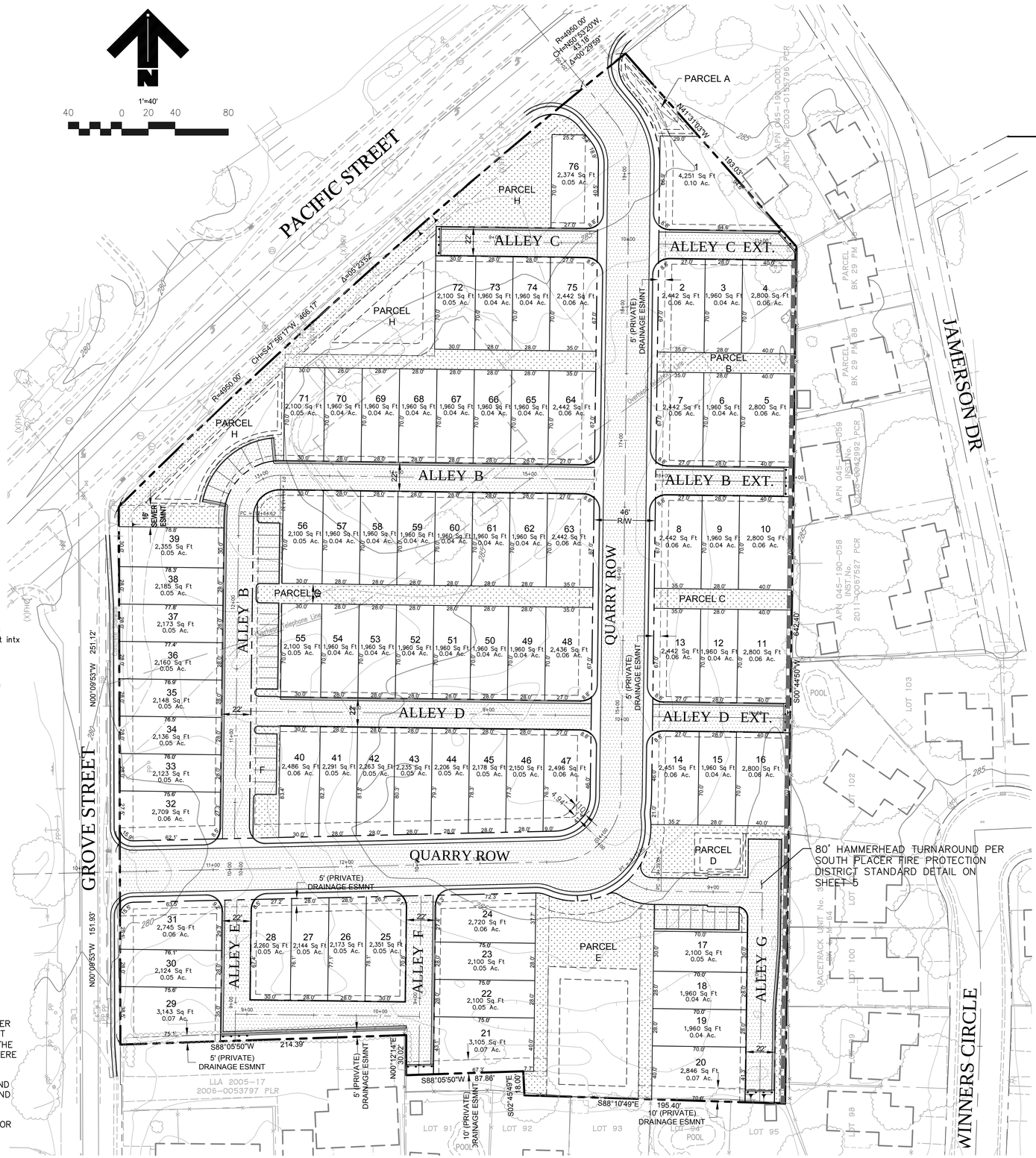
figure 4

QUARRY ROW
TENTATIVE MAP
LOTTING PLAN
ROCKLIN, CALIFORNIA

MAY 2019
SHEET 1 OF 5



VICINITY MAP
NTS



LEGEND

- PROJECT BOUNDARY LINE
- ADJACENT EXISTING LOT LINES
- PROPOSED LOT LINES
- R/W – EXISTING
- R/W – PROPOSED
- EASEMENT

ABBREVIATIONS

AB	aggregate base	MED	median
AC	asphalt concrete	MH	manhole
ARV	air release valve	MIN	minimum
AVRV	air vacuum release valve	MOD	modified
BC	begin horizontal curve	MON	monument
BM	bench mark	NTS	not to scale
BOV	blow off valve	OC	on center
BVC	begin vertical curve	OG	original ground
BW	back of walk	OH	overhead utility line
C&G	curb, gutter	PL	property line
CL	centerline	PUE	public utilities easement
CONC	concrete	PVI	point of vertical tangent intx
DI	drainage inlet	PVC	poly vinyl chloride
DIP	ductile iron pipe	PVMT	pavement
DIA	diameter	R	radius
DWY	driveway	RCP	reinforced concrete pipe
EA	each	RT	right
EC	end horizontal curve	R/W OR RW	right of way
EL or ELEV	elevation	S	slope
EG	existing ground	SD	storm drain
EP	edge of pavement	SDMH	storm drain manhole
EQ	equation	SHT	sheet
ESMNT	easement	SS	sanitary sewer
EVC	end vertical curve	SSMH	sanitary sewer manhole
EX or EXIST	existing	STA	station
FES	flared end section	STD	standard
FF	finished floor	STR	structure
FG	finished grade	S.W.	sidewalk
FH	fire hydrant installation	TBC or TC	top back of curb
FL	flow line	TBW or BW	top back of walk
FT	foot; feet	TBM	temporary bench mark
GB	grade break	TEMP	temporary
HP	high point	TFC	top face of curb
HWY	highway	TG	top of grate
INTX	intersection	TI	traffic index
K	vertical curve coefficient	TRANS	transition
LE	landscape easement	TYP	typical
LP	low point	W	water main
LT	left	VCP	vitrified clay pipe
MAX	maximum		

USE EASEMENT

USE EASEMENTS WILL BE PLACED OVER THE SIDE YARD AREA BETWEEN ADJOINING LOTS. A USE EASEMENT ALLOWS THE OWNER OF A LOT TO USE THE SIDE YARD OF NEIGHBORING LOT AS IF IT WERE HIS/HER PROPERTY. THE NEIGHBORING OWNER RETAINS THE RIGHT TO ACCESS THE EASEMENT AREA FOR MAINTENANCE. THERE WILL BE NO FENCING ALONG THE SIDE YARD PROPERTY LINE.

THE USE EASEMENT WILL BE FORMALIZED ON THE FINAL MAP AND THE CC&RS, SO THAT ALL OWNERS UNDERSTAND THE RIGHTS AND BENEFITS ASSOCIATED WITH THESE EASEMENTS.

SEE SHEET 5 FOR AN EXAMPLE OF THE USE EASEMENT AREA FOR LOTS 11–13.

SHEET INDEX

BENCHMARK

HORIZONTAL DATUM: THE BEARING S59°17'18"W AS ESTABLISHED ON THAT CERTAIN RECORD OF SURVEY RECORDED IN BOOK 18 OF SURVEYS, AT PAGE 114, PLACWER COUNTY RECORDS IS THE BASIS OF ALL BEARINGS SHOWN HEREON.

VERTICAL DATUM:

OWNERS / DEVELOPER

OWNER: THE IRENE ANN COKER REVOCABLE LIVING TRUST
IRENE ANN COKER, TRUSTEE
4661 GROVE STREET
ROCKLIN, CA 95677

DEVELOPER: LOWELL DEVELOPMENT, INC.
P.O. BOX 1200 LOOMIS, CA 95650
PHONE: (916) 660-1720

ENGINEER

TLA ENGINEERING AND PLANNING
1504 EUREKA ROAD, SUITE 110
ROSEVILLE, CA 95661
PHONE: (916) 786-0685

DATE OF SURVEY

06/16/2015

LOT SIZE (SQUARE FEET)

MIN: 1,960 MAX: 4,251 AVG: 2,264
MIN WIDTH: 28.0'
MIN DEPTH: 70.0'

ACREAGE

TOTAL SINGLE FAMILY LOTS	3.95±
TOTAL QUARRY ROW RIGHT OF WAY	1.02±
TOTAL ALLEY RIGHT OF WAY	0.96±
PARCEL A	0.03±
PARCEL B	0.04±
PARCEL C	0.04±
PARCEL D	0.11±
PARCEL E	0.34±
PARCEL F (INCLUDES PARKING AREA)	0.04±
PARCEL G (INCLUDES PARKING AREA)	0.16±
PARCEL H (INCLUDES PARKING AREA)	0.49±
TOTAL AREA	7.17±

UTILITY AND SERVICE PROVIDERS:

WATER:	PLACER COUNTY WATER AGENCY
SEWER:	SOUTH PLACER MUNICIPAL UTILITY DISTRICT
GAS & ELECTRIC:	PACIFIC GAS & ELECTRIC
TELEPHONE:	AT&T
CABLE TV:	WAVE BROADBAND
SCHOOL DISTRICT:	ROCKLIN UNIFIED SCHOOL DISTRICT
STREET MAINTENANCE:	CITY OF ROCKLIN
FIRE PROTECTION:	CITY OF ROCKLIN FIRE DEPARTMENT
POLICE PROTECTION:	CITY OF ROCKLIN POLICE DEPARTMENT
STORM DRAINAGE:	CITY OF ROCKLIN
SOLID WASTE:	AUBURN PLACER DISPOSAL SERVICE

TLA ENGINEERING & PLANNING
1504 EUREKA ROAD, SUITE 110
ROSEVILLE, CA 95661 916.786.0685

File: N:\proj\15XX\1564\Dwg\Entitlements\T-Map\01_LOTTING.dwg Jun 10, 2019 - 1:55pm ewinkler

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	EXISTING AM
Command:	Default Command
Volume:	EX AM
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	quarry only am
Trip Distribution:	AM CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for quarry only am

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
10	QUARRY ROW	76.00	sfr	0.19	0.56	14	43	57	100.0
	Zone 10 Subtotal					14	43	57	100.0
TOTAL						14	43	57	100.0

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips AM CURRENT

	To Gates										
Zone	1	2	3	4	6	7	8	9	10	11	12
1	16.0	11.0	35.0	25.0	12.0	0.0	1.0	0.0	0.0	0.0	0.0
2	10.0	0.0	20.0	5.0	0.0	50.0	0.0	0.0	15.0	0.0	0.0
6	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
7	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
9	1.0	0.0	19.0	10.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0
10	0.0	0.0	20.0	10.0	8.0	32.0	0.0	0.0	0.0	5.0	0.0
12	10.0	0.0	20.0	0.0	5.0	45.0	5.0	0.0	10.0	5.0	0.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	10.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0

	To Gates					
Zone	13	14	15	17	18	19
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0
6	10.0	5.0	0.0	0.0	0.0	0.0
7	10.0	5.0	0.0	0.0	0.0	0.0
9	30.0	7.0	10.0	9.0	4.0	0.0
10	0.0	5.0	5.0	5.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	1.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	64.0	0.0
15	0.0	0.0	0.0	0.0	50.0	0.0

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
quarry only am

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	27	74	9	275	112	244	73	352	22	2	253	132	1575
Added	0	0	0	3	0	0	0	4	0	0	12	8	27
Total	27	74	9	278	112	244	73	356	22	2	265	140	1602
#2 PACIFIC / GROVE													
Base	10	0	45	0	0	0	0	590	9	42	400	0	1096
Added	20	0	1	0	0	0	0	4	3	0	0	0	28
Total	30	0	46	0	0	0	0	594	12	42	400	0	1124
#3 PACFIC / YANKEE HILL													
Base	0	0	0	8	0	27	60	577	0	0	415	25	1112
Added	0	0	0	0	0	0	0	4	0	0	0	0	4
Total	0	0	0	8	0	27	60	581	0	0	415	25	1116
#4 PACFIC ACCESS													
Base	0	0	0	5	0	10	23	552	0	0	435	6	1031
Added	0	0	9	0	0	0	0	0	4	3	0	0	16
Total	0	0	9	5	0	10	23	552	4	3	435	6	1047
#5 PAcific St / American Way													
Base	58	23	43	23	29	68	39	408	109	37	313	4	1154
Added	0	0	0	0	0	0	0	9	1	0	3	0	13
Total	58	23	43	23	29	68	39	417	110	37	316	4	1167
#6 GROVE / ACCESS													
Base	0	55	0	0	51	0	0	0	0	0	0	0	106
Added	0	0	4	3	0	0	0	0	0	13	0	20	40
Total	0	55	4	3	51	0	0	0	0	13	0	20	146
#7 GROVE ST / CEDAR ST													
Base	20	33	84	4	41	1	0	20	1	85	29	3	321
Added	0	0	4	0	0	0	0	1	0	10	2	0	17
Total	20	33	88	4	41	1	0	21	1	95	31	3	338

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	A	xxxxx	0.378	A	xxxxx	0.384	+ 0.006 V/C
# 2 PACIFIC / GROVE	B	11.5	0.065	B	12.9	0.077	+ 1.437 D/V
# 3 PACFIC / YANKEE HILL	B	10.7	0.054	B	10.7	0.054	+ 0.004 D/V
# 4 PACFIC ACCESS	B	11.8	0.021	B	12.5	0.021	+ 0.712 D/V
# 5 PAcific St / American Way	A	xxxxx	0.311	A	xxxxx	0.314	+ 0.003 V/C
# 6 GROVE / ACCESS	A	0.0	0.000	A	8.9	0.020	+ 8.906 D/V
# 7 GROVE ST / CEDAR ST	A	7.8	0.155	A	7.9	0.166	+ 0.011 V/C

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.384
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 16 Apr 2016 <<												
Base Vol:	27	74	9	275	112	244	73	352	22	2	253	132
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	74	9	275	112	244	73	352	22	2	253	132
Added Vol:	0	0	0	3	0	0	0	4	0	0	12	8
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	74	9	278	112	244	73	356	22	2	265	140
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	74	9	278	112	0	73	356	22	2	265	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	74	9	278	112	0	73	356	22	2	265	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	74	9	278	112	0	73	356	22	2	265	140
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2731	169	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.01	0.19	0.08	0.00	0.05	0.13	0.13	0.00	0.09	0.10
Crit Volume:		74		278			73				133	
Crit Moves:		****		****			****				****	

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 PACIFIC / GROVE

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[12.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 0	0 0	0	1 0	1 1	0	1 0	2 0	0
Volume Module:												
Base Vol:	10	0	45	0	0	0	0	590	9	42	400	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	45	0	0	0	0	590	9	42	400	0
Added Vol:	20	0	1	0	0	0	0	4	3	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	46	0	0	0	0	594	12	42	400	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	46	0	0	0	0	594	12	42	400	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	30	0	46	0	0	0	0	594	12	42	400	0
Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	884	1084	303	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	606	xxxx	xxxxx
Potent Cap.:	285	216	693	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	968	xxxx	xxxxx
Move Cap.:	275	206	693	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	968	xxxx	xxxxx
Total Cap:	390	325	xxxxx	367	312	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.08	0.00	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	531	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	12.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		12.9			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		B			*			*			*	

Note: Queue reported is the number of cars per lane.

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #3 PACFIC / YANKEE HILL

****

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[10.7]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1! 0 0			0 1 0 0 1			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	8	0	27	60	577	0	0	415	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	8	0	27	60	577	0	0	415	25
Added Vol:	0	0	0	0	0	0	0	4	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	8	0	27	60	581	0	0	415	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	8	0	27	60	581	0	0	415	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	8	0	27	60	581	0	0	415	25
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	909	1141	291	838	1129	220	440	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	230	199	706	305	203	784	1116	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	213	189	706	292	192	784	1116	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	304	294	xxxxx	414	305	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.02	0.00	0.03	0.05	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.8	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	0	xxxxx	414	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	13.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	B	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			10.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

****

Note: Queue reported is the number of cars per lane.

****

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 PACFIC ACCESS

Average Delay (sec/veh): 0.5 Worst Case Level Of Service: B[12.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	0	5	0	10	23	552	0	0	435	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	5	0	10	23	552	0	0	435	6
Added Vol:	0	0	9	0	0	0	0	0	4	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	9	5	0	10	23	552	4	3	435	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	9	5	0	10	23	552	4	3	435	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	9	5	0	10	23	552	4	3	435	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	278	766	1046	221	441	xxxx	xxxxx	556	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	719	292	227	783	1115	xxxx	xxxxx	1011	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	719	283	222	783	1115	xxxx	xxxxx	1011	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.01	0.02	0.00	0.01	0.02	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.1	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	8.6	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	493	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	12.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		10.1			12.5			xxxxxx			xxxxxx	
ApproachLOS:		B			B			*			*	

Note: Queue reported is the number of cars per lane.

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #5 PAcific St / American Way

Cycle (sec):	100	Critical Vol./Cap.(X):	0.314
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	33	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	58	23	43	23	29	68	39	408	109	37	313	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	23	43	23	29	68	39	408	109	37	313	4
Added Vol:	0	0	0	0	0	0	0	9	1	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	58	23	43	23	29	68	39	417	110	37	316	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	58	23	43	23	29	68	39	417	110	37	316	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	58	23	43	23	29	68	39	417	110	37	316	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	58	23	43	23	29	68	39	417	110	37	316	4
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.35	0.65	1.00	0.30	0.70	1.00	1.58	0.42	1.00	1.98	0.02
Final Sat.:	1450	505	945	1450	434	1016	1450	2295	605	1450	2864	36
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.02	0.07	0.07	0.03	0.18	0.18	0.03	0.11	0.11
Crit Volume:	58				97				264	37		
Crit Moves:	****				****				****	****		

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 GROVE / ACCESS

****

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[8.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	55	0	0	51	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	55	0	0	51	0	0	0	0	0	0	0
Added Vol:	0	0	4	3	0	0	0	0	0	13	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	55	4	3	51	0	0	0	0	13	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	55	4	3	51	0	0	0	0	13	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	55	4	3	51	0	0	0	0	13	0	20
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	59	xxxx	xxxxx	xxxx	xxxx	xxxxx	114	114	57
Potent Cap.:	xxxx	xxxx	xxxxx	1545	xxxx	xxxxx	xxxx	xxxx	xxxxx	882	776	1009
Move Cap.:	xxxx	xxxx	xxxxx	1545	xxxx	xxxxx	xxxx	xxxx	xxxxx	881	775	1009
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	955	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

****

Note: Queue reported is the number of cars per lane.

****

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.166
Loss Time (sec):	0	Average Delay (sec/veh):	7.9
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	0 1	0	0 0	1!	0 0
Volume Module:												
Base Vol:	20	33	84	4	41	1	0	20	1	85	29	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	33	84	4	41	1	0	20	1	85	29	3
Added Vol:	0	0	4	0	0	0	0	1	0	10	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	33	88	4	41	1	0	21	1	95	31	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	33	88	4	41	1	0	21	1	95	31	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	33	88	4	41	1	0	21	1	95	31	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	33	88	4	41	1	0	21	1	95	31	3
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.23	0.63	0.09	0.89	0.02	0.00	0.95	0.05	0.74	0.24	0.02
Final Sat.:	124	205	547	68	700	17	0	742	35	573	187	18
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.16	0.06	0.06	0.06	xxxx	0.03	0.03	0.17	0.17	0.17
Crit Moves:		****			****				****		****	
Delay/Veh:	7.7	7.7	7.7	7.7	7.7	7.7	0.0	7.6	7.6	8.3	8.3	8.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.7	7.7	7.7	7.7	7.7	7.7	0.0	7.6	7.6	8.3	8.3	8.3
LOS by Move:	A	A	A	A	A	A	*	A	A	A	A	A
ApproachDel:		7.7			7.7			7.6			8.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.7			7.7			7.6			8.3	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	EXISTING PM
Command:	Default Command
Volume:	EX PM 2013
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	quarry only pm
Trip Distribution:	CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for quarry only pm

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
10	QUARRY ROW	76.00	sfr	0.63	0.37	48	28	76	100.0
	Zone 10 Subtotal					48	28	76	100.0
TOTAL						48	28	76	100.0

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips CURRENT

	To Gates										
Zone	1	2	3	4	5	6	7	8	9	10	11
1	9.0	4.0	18.0	11.0	10.0	8.0	8.0	14.0	6.0	0.0	0.0
2	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
6	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
7	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
9	1.0	0.0	19.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	25.0	10.0	0.0	2.0	26.0	0.0	0.0	0.0	2.0
12	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	4.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0

	To Gates							
Zone	12	13	14	15	16	17	18	19
1	0.0	0.0	0.0	0.0	6.0	0.0	0.0	6.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
7	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
9	0.0	43.0	7.0	10.0	0.0	9.0	9.0	0.0
10	0.0	0.0	5.0	10.0	0.0	10.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	1.0	0.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	70.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	56.0	0.0

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
quarry only pm

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	10	61	9	185	28	155	246	435	18	9	448	278	1882
Added	0	0	0	6	0	0	0	15	0	0	9	3	33
Total	10	61	9	191	28	155	246	450	18	9	457	281	1915
#2 PACIFIC / GROVE													
Base	12	0	34	0	0	0	0	566	15	37	668	0	1332
Added	12	0	1	0	0	0	0	12	8	0	0	0	33
Total	24	0	35	0	0	0	0	578	23	37	668	0	1365
#3 PACFIC / YANKEE HILL													
Base	8	0	1	26	0	55	22	571	8	16	644	11	1362
Added	0	0	0	0	0	0	0	13	0	0	0	0	13
PassBy	-8	0	-1	0	0	0	0	0	-8	-16	0	0	-33
Total	0	0	0	26	0	55	22	584	0	0	644	11	1342
#4 PACFIC ACCESS													
Base	0	0	0	0	0	0	3	604	0	0	666	0	1273
Added	0	0	9	0	0	0	0	0	13	15	0	0	37
Total	0	0	9	0	0	0	3	604	13	15	666	0	1310
#5 PAcific St / American Way													
Base	129	49	64	7	32	46	39	469	99	77	494	9	1514
Added	1	0	0	0	0	0	0	9	1	0	15	0	26
Total	130	49	64	7	32	46	39	478	100	77	509	9	1540
#6 GROVE / ACCESS													
Base	0	46	0	0	52	0	0	0	0	0	0	0	98
Added	0	1	11	9	0	0	0	0	0	7	0	12	40
Total	0	47	11	9	52	0	0	0	0	7	0	12	138
#7 GROVE ST / CEDAR ST													
Base	2	10	49	2	9	0	1	10	1	46	20	6	156
Added	0	0	9	0	0	0	0	2	0	5	1	0	17
Total	2	10	58	2	9	0	1	12	1	51	21	6	173

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	A	xxxxx	0.494	A	xxxxx	0.501	+ 0.007 V/C
# 2 PACIFIC / GROVE	B	11.9	0.048	B	13.1	0.066	+ 1.175 D/V
# 3 PACFIC / YANKEE HILL	C	16.4	0.086	B	12.4	0.082	-4.007 D/V
# 4 PACFIC ACCESS	A	8.9	0.003	B	10.3	0.016	+ 1.378 D/V
# 5 PAcific St / American Way	A	xxxxx	0.392	A	xxxxx	0.396	+ 0.004 V/C
# 6 GROVE / ACCESS	A	0.0	0.000	A	8.8	0.012	+ 8.843 D/V
# 7 GROVE ST / CEDAR ST	A	7.2	0.085	A	7.3	0.092	+ 0.008 V/C

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.501
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1	1 0	1 0	2 0	1
Volume Module: >> Count Date: 16 Apr 2016 <<												
Base Vol:	10	61	9	185	28	155	246	435	18	9	448	278
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	61	9	185	28	155	246	435	18	9	448	278
Added Vol:	0	0	0	6	0	0	0	15	0	0	9	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	61	9	191	28	155	246	450	18	9	457	281
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	61	9	191	28	0	246	450	18	9	457	281
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	61	9	191	28	0	246	450	18	9	457	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	61	9	191	28	0	246	450	18	9	457	281
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.92	0.08	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2788	112	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.01	0.13	0.02	0.00	0.17	0.16	0.16	0.01	0.16	0.19
Crit Volume:		61		191			246				229	
Crit Moves:		****		****			****				****	

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 PACIFIC / GROVE

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[13.1]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	1 0 1	1	0	1 0 2	0	0
Volume Module:												
Base Vol:	12	0	34	0	0	0	0	566	15	37	668	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	12	0	34	0	0	0	0	566	15	37	668	0
Added Vol:	12	0	1	0	0	0	0	12	8	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	0	35	0	0	0	0	578	23	37	668	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	24	0	35	0	0	0	0	578	23	37	668	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	24	0	35	0	0	0	0	578	23	37	668	0
Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	998	1332	301	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	601	xxxx	xxxxx
Potent Cap.:	241	153	696	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	972	xxxx	xxxxx
Move Cap.:	234	147	696	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	972	xxxx	xxxxx
Total Cap:	362	269	xxxxx	278	260	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.07	0.00	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.8	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	506	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		13.1		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 PACFIC / YANKEE HILL

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[12.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	8	0	1	26	0	55	22	571	8	16	644	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	1	26	0	55	22	571	8	16	644	11
Added Vol:	0	0	0	0	0	0	0	13	0	0	0	0
PasserByVol:	-8	0	-1	0	0	0	0	0	-8	-16	0	0
Initial Fut:	0	0	0	26	0	55	22	584	0	0	644	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	0	55	22	584	0	0	644	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	26	0	55	22	584	0	0	644	11
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	950	1283	292	986	1278	328	655	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	215	164	704	245	165	668	928	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	193	160	704	241	161	668	928	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	310	279	xxxxx	362	285	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.07	0.00	0.08	0.02	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.3	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.9	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	0	xxxxx	362	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	15.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			12.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 PACFIC ACCESS

****

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[10.3]

****

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	0	0	0	0	3	604	0	0	0	0	666	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	3	604	0	0	0	0	666	0	0	0
Added Vol:	0	0	9	0	0	0	0	0	0	0	0	0	13	15	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	9	0	0	0	0	0	0	0	3	604	13	15	0	0	666	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	9	0	0	0	0	0	0	0	3	604	13	15	0	0	666	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	9	0	0	0	0	0	0	0	3	604	13	15	0	0	666	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	309	1004	1319	333	666	xxxx	xxxxx	617	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	687	196	156	663	919	xxxx	xxxxx	959	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	687	191	153	663	919	xxxx	xxxxx	959	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.01	0.00	0.00	0.00	0.00	xxxx	xxxx	0.02	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx	8.9	xxxx	xxxxx	8.8	xxxx	xxxxx								
LOS by Move:	*	*	B	*	*	*	A	*	*	A	*	*								
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT								
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*								
ApproachDel:	10.3			xxxxxx			xxxxxx			xxxxxx										
ApproachLOS:	B			*			*			*										

****

Note: Queue reported is the number of cars per lane.

****

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #5 PAcific St / American Way

Cycle (sec):	100	Critical Vol./Cap.(X):	0.396
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	38	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module: >> Count Date: 6 Jun 2013 <<												
Base Vol:	129	49	64	7	32	46	39	469	99	77	494	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	49	64	7	32	46	39	469	99	77	494	9
Added Vol:	1	0	0	0	0	0	0	9	1	0	15	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	49	64	7	32	46	39	478	100	77	509	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	49	64	7	32	46	39	478	100	77	509	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	49	64	7	32	46	39	478	100	77	509	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	49	64	7	32	46	39	478	100	77	509	9
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.43	0.57	1.00	0.41	0.59	1.00	1.65	0.35	1.00	1.97	0.03
Final Sat.:	1450	629	821	1450	595	855	1450	2398	502	1450	2850	50
Capacity Analysis Module:												
Vol/Sat:	0.09	0.08	0.08	0.00	0.05	0.05	0.03	0.20	0.20	0.05	0.18	0.18
Crit Volume:	130				78				289	77		
Crit Moves:	****				****				****	****		

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 GROVE / ACCESS

****

Average Delay (sec/veh): 1.7 Worst Case Level Of Service: A[8.8]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	46	0	0	52	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	46	0	0	52	0	0	0	0	0	0	0
Added Vol:	0	1	11	9	0	0	0	0	0	7	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	47	11	9	52	0	0	0	0	7	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	47	11	9	52	0	0	0	0	7	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	47	11	9	52	0	0	0	0	7	0	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	58	xxxx	xxxxx	xxxx	xxxx	xxxxx	123	123	53
Potent Cap.:	xxxx	xxxx	xxxxx	1546	xxxx	xxxxx	xxxx	xxxx	xxxxx	873	768	1015
Move Cap.:	xxxx	xxxx	xxxxx	1546	xxxx	xxxxx	xxxx	xxxx	xxxxx	869	763	1015
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	956	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.8		
ApproachLOS:	*			*			*			A		

****

Note: Queue reported is the number of cars per lane.

****

EXSTING PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.092
Loss Time (sec):	0	Average Delay (sec/veh):	7.3
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	2	10	49	2	9	0	1	10	1	46	20	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	10	49	2	9	0	1	10	1	46	20	6
Added Vol:	0	0	9	0	0	0	0	2	0	5	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	10	58	2	9	0	1	12	1	51	21	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	10	58	2	9	0	1	12	1	51	21	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	10	58	2	9	0	1	12	1	51	21	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	10	58	2	9	0	1	12	1	51	21	6
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.14	0.83	0.18	0.82	0.00	0.07	0.86	0.07	0.65	0.27	0.08
Final Sat.:	28	138	799	151	681	0	61	731	61	552	227	65
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.01	0.01	xxxx	0.02	0.02	0.02	0.09	0.09	0.09
Crit Moves:		****			****		****				****	
Delay/Veh:	6.9	6.9	6.9	7.3	7.3	0.0	7.2	7.2	7.2	7.6	7.6	7.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	6.9	6.9	7.3	7.3	0.0	7.2	7.2	7.2	7.6	7.6	7.6
LOS by Move:	A	A	A	A	A	*	A	A	A	A	A	A
ApproachDel:		6.9			7.3			7.2			7.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		6.9			7.3			7.2			7.6	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	EPAP AM
Command:	Default Command
Volume:	EPAP AM
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	AM PEAK
Trip Distribution:	AM CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for AM PEAK

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	The Summitt	115.00	SFR	0.19	0.56	22	64	86	13.3
	Zone 1 Subtotal					22	64	86	13.3
2	Avalon	79.00	SFR	0.19	0.56	15	44	59	9.1
	Zone 2 Subtotal					15	44	59	9.1
6	PARK PLACE N	76.00	sfr	0.19	0.56	14	43	57	8.8
	Zone 6 Subtotal					14	43	57	8.8
7	PARK PLACE S	66.00	SFR	0.19	0.56	13	37	50	7.7
	Zone 7 Subtotal					13	37	50	7.7
9	BRIGHTON	75.00	SFR	0.19	0.56	14	42	56	8.6
9	BRIGHTON	0.00	arnet MFR	0.10	0.41	0	0	0	0.0
	Zone 9 Subtotal					14	42	56	8.6
10	QUARRY ROW	76.00	sfr	0.19	0.56	14	43	57	8.8
	Zone 10 Subtotal					14	43	57	8.8
12	Granite Terr	0.00	condo	0.13	0.39	0	0	0	0.0
12	Granite Terr	42.00	SFR	0.19	0.56	8	24	32	4.9
	Zone 12 Subtotal					8	24	32	4.9
13	ROCKLIN AUDI	34.00	AUDI	1.44	0.48	49	16	65	10.0
	Zone 13 Subtotal					49	16	65	10.0
14	Granite Domi	71.00	SFR	0.19	0.56	13	40	53	8.2
	Zone 14 Subtotal					13	40	53	8.2
15	Garnet Creek	260.00	MFR	0.11	0.40	29	104	133	20.5
	Zone 15 Subtotal					29	104	133	20.5
TOTAL						191	457	648	100.0

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips AM CURRENT

	To Gates										
Zone	1	2	3	4	6	7	8	9	10	11	12
1	16.0	11.0	35.0	25.0	12.0	0.0	1.0	0.0	0.0	0.0	0.0
2	10.0	0.0	20.0	5.0	0.0	50.0	0.0	0.0	15.0	0.0	0.0
6	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
7	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
9	1.0	0.0	19.0	10.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0
10	0.0	0.0	20.0	10.0	8.0	32.0	0.0	0.0	0.0	5.0	0.0
12	10.0	0.0	20.0	0.0	5.0	45.0	5.0	0.0	10.0	5.0	0.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	10.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0

	To Gates					
Zone	13	14	15	17	18	19
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0
6	10.0	5.0	0.0	0.0	0.0	0.0
7	10.0	5.0	0.0	0.0	0.0	0.0
9	30.0	7.0	10.0	9.0	4.0	0.0
10	0.0	5.0	5.0	5.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	1.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	64.0	0.0
15	0.0	0.0	0.0	0.0	50.0	0.0

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
AM PEAK

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	27	74	9	282	112	256	81	366	22	10	290	136	1665
Added	0	5	0	22	8	22	8	27	0	0	65	38	195
Total	27	79	9	304	120	278	89	393	22	10	355	174	1860
#2 PACIFIC / GROVE													
Base	10	0	45	0	0	0	0	615	9	42	449	0	1170
Added	20	0	3	0	0	0	0	46	3	2	83	0	157
Total	30	0	48	0	0	0	0	661	12	44	532	0	1327
#3 PACFIC / YANKEE HILL													
Base	0	0	0	8	0	27	60	602	0	0	464	25	1186
Added	0	0	0	0	0	0	0	49	0	0	85	0	134
Total	0	0	0	8	0	27	60	651	0	0	549	25	1320
#4 PACFIC ACCESS													
Base	0	0	0	5	0	10	23	577	0	0	484	6	1105
Added	0	0	9	0	0	0	0	45	4	3	85	0	146
Total	0	0	9	5	0	10	23	622	4	3	569	6	1251
#5 PAcific St / American Way													
Base	57	38	38	23	29	68	39	549	40	32	362	4	1279
Added	0	4	0	0	12	30	10	44	1	0	58	0	159
Total	57	42	38	23	41	98	49	593	41	32	420	4	1438
#6 GROVE / ACCESS													
Base	0	46	0	0	52	0	0	0	0	0	0	0	98
Added	0	3	4	3	2	0	0	0	0	13	0	20	45
Total	0	49	4	3	54	0	0	0	0	13	0	20	143
#7 GROVE ST / CEDAR ST													
Base	20	33	84	4	41	1	0	20	1	85	29	3	321
Added	0	0	11	0	0	0	0	3	0	21	3	0	38
Total	20	33	95	4	41	1	0	23	1	106	32	3	359
#8 Rocklin Rd / Meyers St													
Base	9	528	150	47	535	1	0	0	3	182	3	62	1520
Added	6	3	7	1	17	3	20	0	11	19	0	4	91
Total	15	531	157	48	552	4	20	0	14	201	3	66	1611

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	A	xxxxx	0.401	A	xxxxx	0.448	+ 0.047 V/C
# 2 PACIFIC / GROVE	B	11.7	0.066	B	13.7	0.086	+ 2.073 D/V
# 3 PACFIC / YANKEE HILL	B	10.9	0.056	B	11.4	0.060	+ 0.482 D/V
# 4 PACFIC ACCESS	B	12.3	0.022	B	14.4	0.023	+ 2.074 D/V
# 5 PAcific St / American Way	A	xxxxx	0.331	A	xxxxx	0.376	+ 0.044 V/C
# 6 GROVE / ACCESS	A	0.0	0.000	A	8.9	0.020	+ 8.882 D/V
# 7 GROVE ST / CEDAR ST	A	7.8	0.155	A	8.0	0.182	+ 0.027 V/C
# 8 Rocklin Rd / Meyers St	A	6.3	0.585	A	6.6	0.604	+ 0.019 V/C

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module: >> Count Date: 13 Jan 2017 << adjusted EPAP												
Base Vol:	27	74	9	282	112	256	81	366	22	10	290	136
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	74	9	282	112	256	81	366	22	10	290	136
Added Vol:	0	5	0	22	8	22	8	27	0	0	65	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	27	79	9	304	120	278	89	393	22	10	355	174
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	79	9	304	120	0	89	393	22	10	355	174
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	79	9	304	120	0	89	393	22	10	355	174
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	79	9	304	120	0	89	393	22	10	355	174
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.89	0.11	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2746	154	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.02	0.05	0.01	0.21	0.08	0.00	0.06	0.14	0.14	0.01	0.12	0.12
Crit Volume:		79		304			89				178	
Crit Moves:		****		****			****				****	

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 PACIFIC / GROVE

Average Delay (sec/veh): 1.1 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	1 0 1	1	0	1 0 2	0	0
Volume Module:												
Base Vol:	10	0	45	0	0	0	0	615	9	42	449	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	0	45	0	0	0	0	615	9	42	449	0
Added Vol:	20	0	3	0	0	0	0	46	3	2	83	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	48	0	0	0	0	661	12	44	532	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	48	0	0	0	0	661	12	44	532	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	30	0	48	0	0	0	0	661	12	44	532	0
Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1021	1287	337	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	673	xxxx	xxxxx
Potent Cap.:	232	163	659	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	914	xxxx	xxxxx
Move Cap.:	224	155	659	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	914	xxxx	xxxxx
Total Cap:	347	278	xxxxx	305	266	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.09	0.00	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.1	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	490	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	13.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	B	*	*	*	*	*	*	*	*	*	*
ApproachDel:		13.7		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		B		*			*			*		

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 PACFIC / YANKEE HILL

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: B[11.4]

Approach:	North Bound			South Bound			East Bound					West Bound				
Movement:	L	- T	- R	L	- T	- R	L	- T	- R			L	- T	- R		
Control:	Stop Sign			Stop Sign			Uncontrolled					Uncontrolled				
Rights:	Include			Include			Include					Include				
Lanes:	0	0 1!	0	0	1	0 0 1	1	0	1	1	0	1	0	1	1	0
Volume Module:																
Base Vol:	0	0	0	8	0	27	60	602	0		0	464		25		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
Initial Bse:	0	0	0	8	0	27	60	602	0		0	464		25		
Added Vol:	0	0	0	0	0	0	0	49	0		0	85		0		
PasserByVol:	0	0	0	0	0	0	0	0	0		0	0		0		
Initial Fut:	0	0	0	8	0	27	60	651	0		0	549		25		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00		
PHF Volume:	0	0	0	8	0	27	60	651	0		0	549		25		
Reduct Vol:	0	0	0	0	0	0	0	0	0		0	0		0		
FinalVolume:	0	0	0	8	0	27	60	651	0		0	549		25		
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	1046	1345	326	1007	1333	287	574	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	183	150	670	237	153	710	995	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	168	141	670	226	144	710	995	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Total Cap:	266	251	xxxxx	356	263	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.00	0.00	0.00	0.02	0.00	0.04	0.06	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.1	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.3	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	0	xxxxx	356	xxxx	xxxxx	xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx	15.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*	C	*	*	*	*	*			*	*	*		
ApproachDel:	xxxxxx			11.4			xxxxxx					xxxxxx				
ApproachLOS:	*			B			*					*				

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 PACFIC ACCESS

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: B[14.4]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	0	0	0	5	0	10	23	577	0	0	484	6								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	5	0	10	23	577	0	0	484	6								
Added Vol:	0	0	9	0	0	0	0	45	4	3	85	0								
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0								
Initial Fut:	0	0	9	5	0	10	23	622	4	3	569	6								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	9	5	0	10	23	622	4	3	569	6								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
FinalVolume:	0	0	9	5	0	10	23	622	4	3	569	6								
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx								
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx								
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	313	935	1250	288	575	xxxx	xxxxx	626	xxxx	xxxxx								
Potent Cap.:	xxxx	xxxx	683	220	172	709	994	xxxx	xxxxx	952	xxxx	xxxxx								
Move Cap.:	xxxx	xxxx	683	213	167	709	994	xxxx	xxxxx	952	xxxx	xxxxx								
Volume/Cap:	xxxx	xxxx	0.01	0.02	0.00	0.01	0.02	xxxx	xxxx	0.00	xxxx	xxxx								
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.0	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx								
Control Del:	xxxxx	xxxx	10.3	xxxxx	xxxx	xxxxx	8.7	xxxx	xxxxx	8.8	xxxx	xxxxx								
LOS by Move:	*	*	B	*	*	*	A	*	*	A	*	*								
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	399	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx								
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	14.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx								
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*								
ApproachDel:		10.3			14.4			xxxxxx			xxxxxx									
ApproachLOS:		B			B			*			*									

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #5 PAcific St / American Way

Cycle (sec):	100	Critical Vol./Cap.(X):	0.376
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	37	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	57	38	38	23	29	68	39	549	40	32	362	4
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	57	38	38	23	29	68	39	549	40	32	362	4
Added Vol:	0	4	0	0	12	30	10	44	1	0	58	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	42	38	23	41	98	49	593	41	32	420	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	42	38	23	41	98	49	593	41	32	420	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	42	38	23	41	98	49	593	41	32	420	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	57	42	38	23	41	98	49	593	41	32	420	4
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.52	0.48	1.00	0.29	0.71	1.00	1.87	0.13	1.00	1.98	0.02
Final Sat.:	1450	761	689	1450	428	1022	1450	2712	188	1450	2873	27
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.10	0.10	0.03	0.22	0.22	0.02	0.15	0.15
Crit Volume:	57				139				317	32		
Crit Moves:	****				****				****	****		

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 GROVE / ACCESS

Average Delay (sec/veh): 2.2 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	46	0	0	52	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	46	0	0	52	0	0	0	0	0	0	0
Added Vol:	0	3	4	3	2	0	0	0	0	13	0	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	49	4	3	54	0	0	0	0	13	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	49	4	3	54	0	0	0	0	13	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	49	4	3	54	0	0	0	0	13	0	20
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	53	xxxx	xxxxx	xxxx	xxxx	xxxxx	111	111	51
Potent Cap.:	xxxx	xxxx	xxxxx	1553	xxxx	xxxxx	xxxx	xxxx	xxxxx	886	779	1017
Move Cap.:	xxxx	xxxx	xxxxx	1553	xxxx	xxxxx	xxxx	xxxx	xxxxx	885	778	1017
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	960	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.182
Loss Time (sec):	0	Average Delay (sec/veh):	8.0
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	0 1	0	0 0	1!	0 0
Volume Module:												
Base Vol:	20	33	84	4	41	1	0	20	1	85	29	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	33	84	4	41	1	0	20	1	85	29	3
Added Vol:	0	0	11	0	0	0	0	3	0	21	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	33	95	4	41	1	0	23	1	106	32	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	33	95	4	41	1	0	23	1	106	32	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	33	95	4	41	1	0	23	1	106	32	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	33	95	4	41	1	0	23	1	106	32	3
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.22	0.64	0.09	0.89	0.02	0.00	0.96	0.04	0.75	0.23	0.02
Final Sat.:	117	194	558	68	692	17	0	738	32	581	175	16
Capacity Analysis Module:												
Vol/Sat:	0.17	0.17	0.17	0.06	0.06	0.06	xxxx	0.03	0.03	0.18	0.18	0.18
Crit Moves:			****		****			****		****		
Delay/Veh:	7.8	7.8	7.8	7.7	7.7	7.7	0.0	7.6	7.6	8.5	8.5	8.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.8	7.8	7.8	7.7	7.7	7.7	0.0	7.6	7.6	8.5	8.5	8.5
LOS by Move:	A	A	A	A	A	A	*	A	A	A	A	A
ApproachDel:		7.8			7.7			7.6			8.5	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.8			7.7			7.6			8.5	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.2	0.2	0.2

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	EPAP PM
Command:	Default Command
Volume:	EPAP PM
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	PM PEAK
Trip Distribution:	CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for PM PEAK

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
1	The Summitt	115.00	SFR	0.65	0.36	75	41	116	13.6
	Zone 1 Subtotal					75	41	116	13.6
2	Avalon	79.00	SFR	0.65	0.36	51	28	79	9.3
	Zone 2 Subtotal					51	28	79	9.3
6	PARK PLACE N	76.00	sfr	0.63	0.37	48	28	76	8.9
	Zone 6 Subtotal					48	28	76	8.9
7	PARK PLACE S	66.00	SFR	0.63	0.37	42	24	66	7.8
	Zone 7 Subtotal					42	24	66	7.8
9	BRIGHTON	75.00	SFR	0.63	0.37	47	28	75	8.8
9	BRIGHTON	0.00	arnet MFR	0.40	0.22	0	0	0	0.0
	Zone 9 Subtotal					47	28	75	8.8
10	QUARRY ROW	76.00	sfr	0.63	0.37	48	28	76	8.9
	Zone 10 Subtotal					48	28	76	8.9
12	Granite Terr	0.00	condo	0.40	0.22	0	0	0	0.0
12	Granite Terr	42.00	SFR	0.63	0.37	26	16	42	4.9
	Zone 12 Subtotal					26	16	42	4.9
13	ROCKLIN AUDI	34.00	AUDI	1.05	1.55	36	53	89	10.5
	Zone 13 Subtotal					36	53	89	10.5
14	Granite Domi	71.00	SFR	0.63	0.37	45	26	71	8.3
	Zone 14 Subtotal					45	26	71	8.3
15	Garnet Creek	260.00	MFR	0.40	0.22	104	57	161	18.9
	Zone 15 Subtotal					104	57	161	18.9
TOTAL						522	329	851	100.0

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips CURRENT

	To Gates										
Zone	1	2	3	4	5	6	7	8	9	10	11
1	9.0	4.0	18.0	11.0	10.0	8.0	8.0	14.0	6.0	0.0	0.0
2	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
6	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
7	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
9	1.0	0.0	19.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	25.0	10.0	0.0	2.0	26.0	0.0	0.0	0.0	2.0
12	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	4.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0

	To Gates							
Zone	12	13	14	15	16	17	18	19
1	0.0	0.0	0.0	0.0	6.0	0.0	0.0	6.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
7	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
9	0.0	43.0	7.0	10.0	0.0	9.0	9.0	0.0
10	0.0	0.0	5.0	10.0	0.0	10.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	1.0	0.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	70.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	56.0	0.0

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
PM PEAK

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	10	61	9	206	28	176	277	497	18	9	501	302	2094
Added	0	3	0	22	2	11	20	74	0	0	48	18	198
Total	10	64	9	228	30	187	297	571	18	9	549	320	2292
#2 PACIFIC / GROVE													
Base	12	0	34	0	0	0	0	653	15	37	745	0	1496
Added	12	0	4	0	0	0	0	87	8	4	53	0	168
Total	24	0	38	0	0	0	0	740	23	41	798	0	1664
#3 PACFIC / YANKEE HILL													
Base	8	0	1	26	0	55	22	658	8	16	721	11	1526
Added	0	0	0	0	0	0	0	91	0	0	57	0	148
PassBy	-8	0	-1	0	0	0	0	0	-8	-16	0	0	-33
Total	0	0	0	26	0	55	22	749	0	0	778	11	1641
#4 PACFIC ACCESS													
Base	0	0	0	0	0	0	3	691	0	0	743	0	1437
Added	0	0	9	0	0	0	0	78	13	15	57	0	172
Total	0	0	9	0	0	0	3	769	13	15	800	0	1609
#5 PAcific St / American Way													
Base	129	49	64	7	21	46	39	524	109	77	573	9	1647
Added	1	23	0	0	13	17	29	57	1	0	55	0	196
Total	130	72	64	7	34	63	68	581	110	77	628	9	1843
#6 GROVE / ACCESS													
Base	0	46	0	0	52	0	0	0	0	0	0	0	98
Added	0	4	11	9	3	0	0	0	0	7	0	12	46
Total	0	50	11	9	55	0	0	0	0	7	0	12	144
#7 GROVE ST / CEDAR ST													
Base	2	10	49	2	9	0	1	10	1	46	20	6	156
Added	0	0	15	0	0	0	0	4	1	10	4	0	34
Total	2	10	64	2	9	0	1	14	2	56	24	6	190
#8 Rocklin Rd / Meyers St													
Base	17	898	139	47	872	1	4	0	15	84	0	24	2101
Added	21	17	22	5	14	10	11	1	8	13	3	3	128
Total	38	915	161	52	886	11	15	1	23	97	3	27	2229

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	A	xxxxx	0.548	A	xxxxx	0.596	+ 0.048 V/C
# 2 PACIFIC / GROVE	B	12.5	0.051	B	14.7	0.082	+ 2.181 D/V
# 3 PACFIC / YANKEE HILL	C	18.0	0.097	B	13.7	0.091	-4.360 D/V
# 4 PACFIC ACCESS	A	9.2	0.003	B	11.0	0.018	+ 1.812 D/V
# 5 PAcific St / American Way	A	xxxxx	0.407	A	xxxxx	0.448	+ 0.041 V/C
# 6 GROVE / ACCESS	A	0.0	0.000	A	8.9	0.012	+ 8.864 D/V
# 7 GROVE ST / CEDAR ST	A	7.2	0.085	A	7.3	0.102	+ 0.018 V/C
# 8 Rocklin Rd / Meyers St	C	17.7	0.899	C	23.3	0.958	+ 0.059 V/C

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.596
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	56	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module: >> Count Date: 13 Jan 2017 << adjusted epap												
Base Vol:	10	61	9	206	28	176	277	497	18	9	501	302
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	61	9	206	28	176	277	497	18	9	501	302
Added Vol:	0	3	0	22	2	11	20	74	0	0	48	18
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	10	64	9	228	30	187	297	571	18	9	549	320
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	64	9	228	30	0	297	571	18	9	549	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	64	9	228	30	0	297	571	18	9	549	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	64	9	228	30	0	297	571	18	9	549	320
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.94	0.06	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2811	89	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.01	0.04	0.01	0.16	0.02	0.00	0.20	0.20	0.20	0.01	0.19	0.22
Crit Volume:		64		228			297				275	
Crit Moves:		****		****			****				****	

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 PACIFIC / GROVE

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[14.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	0	0	0		1	0	1	1	0		1	0	2	0	0	
Volume Module:																								
Base Vol:	12		0		34		0		0		0		0		653		15		37		745		0	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	12		0		34		0		0		0		0		653		15		37		745		0	
Added Vol:	12		0		4		0		0		0		0		87		8		4		53		0	
PasserByVol:	0		0		0		0		0		0		0		0		0		0		0		0	
Initial Fut:	24		0		38		0		0		0		0		740		23		41		798		0	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Volume:	24		0		38		0		0		0		0		740		23		41		798		0	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
FinalVolume:	24		0		38		0		0		0		0		740		23		41		798		0	
Critical Gap Module:																								
Critical Gp:	6.8		6.5		6.9		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		4.1		xxxx		xxxxx	
FollowUpTim:	3.5		4.0		3.3		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		2.2		xxxx		xxxxx	
Capacity Module:																								
Cnflict Vol:	1233		1632		382		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		763		xxxx		xxxxx	
Potent Cap.:	169		100		616		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		845		xxxx		xxxxx	
Move Cap.:	163		96		616		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		845		xxxx		xxxxx	
Total Cap:	293		215		xxxxx		221		206		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Volume/Cap:	0.08		0.00		0.06		xxxx		xxxx		xxxx		xxxx		xxxx		xxxx		0.05		xxxx		xxxx	
Level Of Service Module:																								
2Way95thQ:	xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		0.2		xxxx		xxxxx	
Control Del:	xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		9.5		xxxx		xxxxx	
LOS by Move:	*		*		*		*		*		*		*		*		*		A		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		432		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
SharedQueue:	xxxxx		0.5		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shrd ConDel:	xxxxx		14.7		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
Shared LOS:	*		B		*		*		*		*		*		*		*		*		*		*	
ApproachDel:			14.7				xxxxxx						xxxxxx						xxxxxx					
ApproachLOS:			B				*						*						*					

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 PACFIC / YANKEE HILL

Average Delay (sec/veh): 0.8 Worst Case Level Of Service: B[13.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	1! 0	0	0 1	0 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	8	0	1	26	0	55	22	658	8	16	721	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	1	26	0	55	22	658	8	16	721	11
Added Vol:	0	0	0	0	0	0	0	91	0	0	57	0
PasserByVol:	-8	0	-1	0	0	0	0	0	-8	-16	0	0
Initial Fut:	0	0	0	26	0	55	22	749	0	0	778	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	0	55	22	749	0	0	778	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	26	0	55	22	749	0	0	778	11
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1182	1582	375	1202	1577	395	789	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	145	108	623	177	109	605	827	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	129	105	623	174	106	605	827	xxxx	xxxxx	xxxx	xxxx	xxxxx
Total Cap:	243	223	xxxxx	299	228	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.00	0.00	0.00	0.09	0.00	0.09	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.3	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.5	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	0	xxxxx	299	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	18.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	C	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			13.7			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 PACFIC ACCESS

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: B[11.0]

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Rights:	Include					Include					Include					Include				
Lanes:	0	0	0	0	1	0	0	1!	0	0	1	0	1	1	0	1	0	1	1	0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	0	0	0	0	3	691	0	0	0	0	743	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	3	691	0	0	0	0	743	0	0	0
Added Vol:	0	0	9	0	0	0	0	0	0	0	0	78	13	15	57	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	9	0	0	0	0	0	0	0	3	769	13	15	800	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	9	0	0	0	0	0	0	0	3	769	13	15	800	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	9	0	0	0	0	0	0	0	3	769	13	15	800	0	0	0	0	0
Critical Gap Module:																				
Critical Gp:	xxxxx	xxxx	6.9			7.5	6.5	6.9			4.1	xxxx	xxxxx			4.1	xxxx	xxxxx		
FollowUpTim:	xxxxx	xxxx	3.3			3.5	4.0	3.3			2.2	xxxx	xxxxx			2.2	xxxx	xxxxx		
Capacity Module:																				
Cnflict Vol:	xxxx	xxxx	391			1221	1618	400			800	xxxx	xxxxx			782	xxxx	xxxxx		
Potent Cap.:	xxxx	xxxx	608			136	102	600			819	xxxx	xxxxx			832	xxxx	xxxxx		
Move Cap.:	xxxx	xxxx	608			132	100	600			819	xxxx	xxxxx			832	xxxx	xxxxx		
Volume/Cap:	xxxx	xxxx	0.01			0.00	0.00	0.00			0.00	xxxx	xxxx			0.02	xxxx	xxxx		
Level Of Service Module:																				
2Way95thQ:	xxxx	xxxx	0.0			xxxx	xxxx	xxxxx			0.0	xxxx	xxxxx			0.1	xxxx	xxxxx		
Control Del:	xxxxx	xxxx	11.0			xxxxx	xxxx	xxxxx			9.4	xxxx	xxxxx			9.4	xxxx	xxxxx		
LOS by Move:	*	*	B			*	*	*			A	*	*			A	*	*		
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxx			xxxx		0	xxxxx		xxxx	xxxx	xxxxx			xxxx	xxxx	xxxxx		
SharedQueue:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx			xxxxx	xxxx	xxxxx		
Shared LOS:	*	*	*			*	*	*			*	*	*			*	*	*		
ApproachDel:	11.0					xxxxxx					xxxxxx					xxxxxx				
ApproachLOS:	B					*					*					*				

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #5 PAcific St / American Way

Cycle (sec):	100	Critical Vol./Cap.(X):	0.448
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	41	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	129	49	64	7	21	46	39	524	109	77	573	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	129	49	64	7	21	46	39	524	109	77	573	9
Added Vol:	1	23	0	0	13	17	29	57	1	0	55	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	130	72	64	7	34	63	68	581	110	77	628	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	72	64	7	34	63	68	581	110	77	628	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	72	64	7	34	63	68	581	110	77	628	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	72	64	7	34	63	68	581	110	77	628	9
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.53	0.47	1.00	0.35	0.65	1.00	1.68	0.32	1.00	1.97	0.03
Final Sat.:	1450	768	682	1450	508	942	1450	2438	462	1450	2859	41
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.09	0.00	0.07	0.07	0.05	0.24	0.24	0.05	0.22	0.22
Crit Volume:	130				97				346	77		
Crit Moves:	****				****				****	****		

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 GROVE / ACCESS

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0 1	0	0 1	0 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	46	0	0	52	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	46	0	0	52	0	0	0	0	0	0	0
Added Vol:	0	4	11	9	3	0	0	0	0	7	0	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	50	11	9	55	0	0	0	0	7	0	12
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	50	11	9	55	0	0	0	0	7	0	12
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	50	11	9	55	0	0	0	0	7	0	12
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	61	xxxx	xxxxx	xxxx	xxxx	xxxxx	129	129	56
Potent Cap.:	xxxx	xxxx	xxxxx	1542	xxxx	xxxxx	xxxx	xxxx	xxxxx	866	762	1011
Move Cap.:	xxxx	xxxx	xxxxx	1542	xxxx	xxxxx	xxxx	xxxx	xxxxx	862	758	1011
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	951	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

EPAP PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.102
Loss Time (sec):	0	Average Delay (sec/veh):	7.3
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	2	10	49	2	9	0	1	10	1	46	20	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	10	49	2	9	0	1	10	1	46	20	6
Added Vol:	0	0	15	0	0	0	0	4	1	10	4	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	10	64	2	9	0	1	14	2	56	24	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	2	10	64	2	9	0	1	14	2	56	24	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	2	10	64	2	9	0	1	14	2	56	24	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	2	10	64	2	9	0	1	14	2	56	24	6
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.13	0.84	0.18	0.82	0.00	0.06	0.82	0.12	0.65	0.28	0.07
Final Sat.:	25	126	806	150	675	0	50	702	100	548	235	59
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.01	0.01	xxxx	0.02	0.02	0.02	0.10	0.10	0.10
Crit Moves:	****				****			****			****	
Delay/Veh:	7.0	7.0	7.0	7.3	7.3	0.0	7.2	7.2	7.2	7.7	7.7	7.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.0	7.0	7.0	7.3	7.3	0.0	7.2	7.2	7.2	7.7	7.7	7.7
LOS by Move:	A	A	A	A	A	*	A	A	A	A	A	A
ApproachDel:		7.0			7.3			7.2			7.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.0			7.3			7.2			7.7	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	2030 AM
Command:	Default Command
Volume:	2030 AM
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	quarry only am
Trip Distribution:	AM CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for quarry only am

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
10	QUARRY ROW	12.00	sfr	0.19	0.56	2	7	9	100.0
	Zone 10 Subtotal					2	7	9	100.0
TOTAL						2	7	9	100.0

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips AM CURRENT

	To Gates										
Zone	1	2	3	4	6	7	8	9	10	11	12
1	16.0	11.0	35.0	25.0	12.0	0.0	1.0	0.0	0.0	0.0	0.0
2	10.0	0.0	20.0	5.0	0.0	50.0	0.0	0.0	15.0	0.0	0.0
6	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
7	20.0	0.0	24.0	10.0	5.0	2.0	0.0	5.0	2.0	2.0	15.0
9	1.0	0.0	19.0	10.0	5.0	0.0	0.0	0.0	0.0	5.0	0.0
10	0.0	0.0	20.0	10.0	8.0	32.0	0.0	0.0	0.0	5.0	0.0
12	10.0	0.0	20.0	0.0	5.0	45.0	5.0	0.0	10.0	5.0	0.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	10.0	0.0	0.0	0.0	0.0	17.0	0.0	0.0

	To Gates					
Zone	13	14	15	17	18	19
1	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0
6	10.0	5.0	0.0	0.0	0.0	0.0
7	10.0	5.0	0.0	0.0	0.0	0.0
9	30.0	7.0	10.0	9.0	4.0	0.0
10	0.0	5.0	5.0	5.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	1.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	64.0	0.0
15	0.0	0.0	0.0	0.0	50.0	0.0

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
quarry only am

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	32	88	93	448	194	73	34	627	35	52	660	290	2626
Added	0	0	0	0	0	0	0	1	0	0	2	1	4
Total	32	88	93	448	194	73	34	628	35	52	662	291	2630
#2 PACIFIC / GROVE													
Base	31	0	48	0	0	0	0	953	15	46	916	0	2009
Added	3	0	0	0	0	0	0	1	0	0	0	0	4
Total	34	0	48	0	0	0	0	954	15	46	916	0	2013
#3 PACFIC / YANKEE HILL													
Base	0	0	0	8	0	27	60	941	0	0	935	25	1996
Added	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	8	0	27	60	942	0	0	935	25	1997
#4 PACFIC ACCESS													
Base	0	0	8	5	0	10	23	922	3	3	950	6	1930
Added	0	0	2	0	0	0	0	0	1	0	0	0	3
Total	0	0	10	5	0	10	23	922	4	3	950	6	1933
#5 PAcific St / American Way													
Base	63	19	35	34	40	135	67	697	172	62	761	7	2092
Added	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	63	19	35	34	40	135	67	698	172	62	761	7	2093
#6 GROVE / ACCESS													
Base	0	60	4	2	58	0	0	0	0	11	0	17	152
Added	0	0	1	0	0	0	0	0	0	2	0	3	6
Total	0	60	5	2	58	0	0	0	0	13	0	20	158
#7 GROVE ST / CEDAR ST													
Base	25	40	154	7	50	1	0	37	1	138	47	5	505
Added	0	0	1	0	0	0	0	0	0	2	0	0	3
Total	25	40	155	7	50	1	0	37	1	140	47	5	508
#8 Rocklin Rd / Meyers St													
Base	14	1205	205	208	680	6	9	4	16	164	2	123	2636
Added	0	0	0	0	1	0	0	0	0	1	0	0	2
Total	14	1205	205	208	681	6	9	4	16	165	2	123	2638

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	B	xxxxx	0.637	B	xxxxx	0.638	+ 0.000 V/C
# 2 PACIFIC / GROVE	C	18.3	0.136	C	18.8	0.149	+ 0.503 D/V
# 3 PACFIC / YANKEE HILL	B	14.3	0.084	B	14.3	0.084	+ 0.001 D/V
# 4 PACFIC ACCESS	D	25.1	0.058	D	25.1	0.059	+ 0.062 D/V
# 5 PAcific St / American Way	A	xxxxx	0.507	A	xxxxx	0.507	+ 0.000 V/C
# 6 GROVE / ACCESS	A	8.9	0.017	A	8.9	0.020	+ 0.025 D/V
# 7 GROVE ST / CEDAR ST	A	8.7	0.263	A	8.7	0.264	+ 0.001 V/C
# 8 Rocklin Rd / Meyers St	F	91.5	1.318	F	91.5	1.318	+ 0.000 V/C

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.638
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	63	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	32	88	93	448	194	73	34	627	35	52	660	290
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	32	88	93	448	194	73	34	627	35	52	660	290
Added Vol:	0	0	0	0	0	0	0	1	0	0	2	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	88	93	448	194	73	34	628	35	52	662	291
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	88	93	448	194	0	34	628	35	52	662	291
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	32	88	93	448	194	0	34	628	35	52	662	291
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	32	88	93	448	194	0	34	628	35	52	662	291
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.89	0.11	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2747	153	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.06	0.31	0.13	0.00	0.02	0.23	0.23	0.04	0.23	0.20
Crit Volume:			93	448				332		52		
Crit Moves:			****	****				****		****		

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #2 PACIFIC / GROVE

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: C[18.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0 0		0 0 0	0 0		1 0	1 1	0	1 0	2 0	0
Volume Module:												
Base Vol:	31	0	48	0	0	0	0	953	15	46	916	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	0	48	0	0	0	0	953	15	46	916	0
Added Vol:	3	0	0	0	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	0	48	0	0	0	0	954	15	46	916	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	34	0	48	0	0	0	0	954	15	46	916	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	34	0	48	0	0	0	0	954	15	46	916	0
Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1512	1970	485	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	969	xxxx	xxxxx
Potent Cap.:	111	62	528	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	707	xxxx	xxxxx
Move Cap.:	105	58	528	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	707	xxxx	xxxxx
Total Cap:	228	169	xxxxx	173	158	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.15	0.00	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.4	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	342	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	18.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		18.8		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		C		*			*			*		

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 PACFIC / YANKEE HILL

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: B[14.3]

Approach:	North Bound			South Bound			East Bound					West Bound				
Movement:	L	- T	- R	L	- T	- R	L	- T	- R			L	- T	- R		
Control:	Stop Sign			Stop Sign			Uncontrolled					Uncontrolled				
Rights:	Include			Include			Include					Include				
Lanes:	0	0 1! 0	0	0	1 0	0 1	1	0 1	1 0			1	0 1	1 0		
Volume Module:																
Base Vol:	0	0	0	8	0	27	60	941	0			0	935	25		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Initial Bse:	0	0	0	8	0	27	60	941	0			0	935	25		
Added Vol:	0	0	0	0	0	0	0	1	0			0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0			0	0	0		
Initial Fut:	0	0	0	8	0	27	60	942	0			0	935	25		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
PHF Volume:	0	0	0	8	0	27	60	942	0			0	935	25		
Reduct Vol:	0	0	0	0	0	0	0	0	0			0	0	0		
FinalVolume:	0	0	0	8	0	27	60	942	0			0	935	25		
Critical Gap Module:																
Critical Gp:	7.5	6.5	6.9	6.8	6.5	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Capacity Module:																
Cnflict Vol:	1530	2022	471	1539	2010	480	960	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Potent Cap.:	80	57	539	106	58	532	712	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Move Cap.:	71	53	539	99	53	532	712	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Total Cap:	162	149	xxxxx	223	162	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Volume/Cap:	0.00	0.00	0.00	0.04	0.00	0.05	0.08	xxxx	xxxx	xxxx	xxxx	xxxx				
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.2	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx				
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.1	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
LOS by Move:	*	*	*	*	*	B	B	*	*	*	*	*				
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT			LT -	LTR -	RT		
Shared Cap.:	xxxx	0	xxxxx	223	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx				
SharedQueue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shrd ConDel:	xxxxx	xxxx	xxxxx	21.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx				
Shared LOS:	*	*	*	C	*	*	*	*	*	*	*	*				
ApproachDel:	xxxxxx			14.3			xxxxxx			xxxxxx						
ApproachLOS:	*			B			*			*						

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #4 PACFIC ACCESS

****

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: D[25.1]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	8	5	0	10	23	922	3	3	950	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	8	5	0	10	23	922	3	3	950	6
Added Vol:	0	0	2	0	0	0	0	0	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	10	5	0	10	23	922	4	3	950	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	5	0	10	23	922	4	3	950	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	10	5	0	10	23	922	4	3	950	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	463	1466	1931	478	956	xxxx	xxxxx	926	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	546	89	65	534	715	xxxx	xxxxx	734	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	546	85	63	534	715	xxxx	xxxxx	734	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.02	0.06	0.00	0.02	0.03	xxxx	xxxx	0.00	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.7	xxxxx	xxxx	xxxxx	10.2	xxxx	xxxxx	9.9	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	B	*	*	A	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	194	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	25.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	11.7			25.1			xxxxxx			xxxxxx		
ApproachLOS:	B			D			*			*		

****

Note: Queue reported is the number of cars per lane.

****

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #5 PAcific St / American Way

Cycle (sec):	100	Critical Vol./Cap.(X):	0.507
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	46	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	63	19	35	34	40	135	67	697	172	62	761	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	19	35	34	40	135	67	697	172	62	761	7
Added Vol:	0	0	0	0	0	0	0	1	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	19	35	34	40	135	67	698	172	62	761	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	63	19	35	34	40	135	67	698	172	62	761	7
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	63	19	35	34	40	135	67	698	172	62	761	7
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	19	35	34	40	135	67	698	172	62	761	7
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.35	0.65	1.00	0.23	0.77	1.00	1.60	0.40	1.00	1.98	0.02
Final Sat.:	1450	510	940	1450	331	1119	1450	2327	573	1450	2874	26
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.02	0.12	0.12	0.05	0.30	0.30	0.04	0.26	0.26
Crit Volume:	63				175				435	62		
Crit Moves:	****				****				****	****		

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #6 GROVE / ACCESS

****

Average Delay (sec/veh): 2.0 Worst Case Level Of Service: A[8.9]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	60	4	2	58	0	0	0	0	11	0	17
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	60	4	2	58	0	0	0	0	11	0	17
Added Vol:	0	0	1	0	0	0	0	0	0	2	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	60	5	2	58	0	0	0	0	13	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	60	5	2	58	0	0	0	0	13	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	60	5	2	58	0	0	0	0	13	0	20
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	65	xxxx	xxxxx	xxxx	xxxx	xxxxx	125	125	63
Potent Cap.:	xxxx	xxxx	xxxxx	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx	870	766	1002
Move Cap.:	xxxx	xxxx	xxxxx	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx	870	765	1002
Volume/Cap:	xxxx	xxxx	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.02
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	945	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

****

Note: Queue reported is the number of cars per lane.

****

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.264
Loss Time (sec):	0	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	25	40	154	7	50	1	0	37	1	138	47	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	25	40	154	7	50	1	0	37	1	138	47	5
Added Vol:	0	0	1	0	0	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	40	155	7	50	1	0	37	1	140	47	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	25	40	155	7	50	1	0	37	1	140	47	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	40	155	7	50	1	0	37	1	140	47	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	25	40	155	7	50	1	0	37	1	140	47	5
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	0.18	0.71	0.12	0.86	0.02	0.00	0.97	0.03	0.73	0.24	0.03
Final Sat.:	95	151	586	87	623	12	0	693	19	534	179	19
Capacity Analysis Module:												
Vol/Sat:	0.26	0.26	0.26	0.08	0.08	0.08	xxxx	0.05	0.05	0.26	0.26	0.26
Crit Moves:		****			****				****	****		
Delay/Veh:	8.6	8.6	8.6	8.1	8.1	8.1	0.0	8.0	8.0	9.3	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.6	8.6	8.6	8.1	8.1	8.1	0.0	8.0	8.0	9.3	9.3	9.3
LOS by Move:	A	A	A	A	A	A	*	A	A	A	A	A
ApproachDel:		8.6			8.1			8.0			9.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.6			8.1			8.0			9.3	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.3	0.3	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.3	0.3	0.3

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Scenario Report

Scenario:	PM CUM WITH PACIFIC
Command:	Default Command
Volume:	PM CUM WITH PACIFIC
Geometry:	EXISTING
Impact Fee:	Default Impact Fee
Trip Generation:	quarry only pm
Trip Distribution:	CURRENT
Paths:	NO CLOVER
Routes:	Default Route
Configuration:	Default Configuration

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Generation Report

Forecast for quarry only pm

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
10	QUARRY ROW	12.00	sfr	0.63	0.37	8	4	12	100.0
	Zone 10 Subtotal					8	4	12	100.0
TOTAL						8	4	12	100.0

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Trip Distribution Report

Percent Of Trips CURRENT

	To Gates										
Zone	1	2	3	4	5	6	7	8	9	10	11
1	9.0	4.0	18.0	11.0	10.0	8.0	8.0	14.0	6.0	0.0	0.0
2	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
6	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
7	20.0	0.0	24.0	5.0	0.0	0.0	2.0	0.0	5.0	2.0	2.0
9	1.0	0.0	19.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	25.0	10.0	0.0	2.0	26.0	0.0	0.0	0.0	2.0
12	10.0	0.0	20.0	0.0	0.0	0.0	55.0	0.0	0.0	10.0	5.0
13	5.0	0.0	10.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	9.0	0.0	17.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	9.0	0.0	14.0	4.0	0.0	0.0	0.0	0.0	0.0	17.0	0.0

	To Gates							
Zone	12	13	14	15	16	17	18	19
1	0.0	0.0	0.0	0.0	6.0	0.0	0.0	6.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
7	25.0	10.0	5.0	0.0	0.0	0.0	0.0	0.0
9	0.0	43.0	7.0	10.0	0.0	9.0	9.0	0.0
10	0.0	0.0	5.0	10.0	0.0	10.0	5.0	5.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	1.0	0.0	0.0	0.0	82.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	70.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	56.0	0.0

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Turning Movement Report
quarry only pm

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 Pacific St / Midas Ave													
Base	35	90	34	449	136	100	128	826	53	82	741	537	3211
Added	0	0	0	1	0	0	0	2	0	0	1	0	4
Total	35	90	34	450	136	100	128	828	53	82	742	537	3215
#2 PACIFIC / GROVE													
Base	30	0	39	0	0	0	0	1457	27	42	1198	0	2793
Added	2	0	0	0	0	0	0	2	1	0	0	0	5
Total	32	0	39	0	0	0	0	1459	28	42	1198	0	2798
#3 PACFIC / YANKEE HILL													
Base	0	0	0	26	0	55	22	1474	0	0	1185	11	2773
Added	0	0	0	0	0	0	0	2	0	0	0	0	2
Total	0	0	0	26	0	55	22	1476	0	0	1185	11	2775
#4 PACFIC ACCESS													
Base	0	0	8	0	0	0	3	1486	11	13	1196	0	2717
Added	0	0	1	0	0	0	0	0	2	3	0	0	6
Total	0	0	9	0	0	0	3	1486	13	16	1196	0	2723
#5 PAcific St / American Way													
Base	151	79	136	17	38	63	81	1283	131	136	997	25	3137
Added	0	0	0	0	0	0	0	1	0	0	2	0	3
Total	151	79	136	17	38	63	81	1284	131	136	999	25	3140
#6 GROVE / ACCESS													
Base	0	54	9	7	60	0	0	0	0	6	0	11	147
Added	0	0	2	1	0	0	0	0	0	1	0	2	6
Total	0	54	11	8	60	0	0	0	0	7	0	13	153
#7 GROVE ST / CEDAR ST													
Base	3	12	135	5	10	1	1	28	2	177	77	9	460
Added	0	0	2	0	0	0	0	0	0	1	0	0	3
Total	3	12	137	5	10	1	1	28	2	178	77	9	463
#8 Rocklin Rd / Meyers St													
Base	46	1305	265	56	1340	5	10	0	19	271	3	35	3355
Added	0	1	1	0	0	0	0	0	0	1	0	0	3
Total	46	1306	266	56	1340	5	10	0	19	272	3	35	3358

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 Pacific St / Midas Ave	C	xxxxx	0.731	C	xxxxx	0.733	+ 0.001 V/C
# 2 PACIFIC / GROVE	D	32.0	0.234	D	33.2	0.251	+ 1.164 D/V
# 3 PACFIC / YANKEE HILL	C	19.7	0.160	C	19.7	0.160	+ 0.006 D/V
# 4 PACFIC ACCESS	C	15.4	0.029	C	15.4	0.036	+ 0.046 D/V
# 5 PAcific St / American Way	C	xxxxx	0.755	C	xxxxx	0.756	+ 0.000 V/C
# 6 GROVE / ACCESS	A	8.9	0.011	A	8.9	0.013	+ 0.020 D/V
# 7 GROVE ST / CEDAR ST	A	8.8	0.332	A	8.8	0.334	+ 0.002 V/C
# 8 Rocklin Rd / Meyers St	F	165.9	1.388	F	166.4	1.390	+ 0.002 V/C

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

Intersection #1 Pacific St / Midas Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.733
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxxx
Optimal Cycle:	85	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Ignore			Include			Ovl		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	1	0 1	1 0	1	0 1	1 0	1	1 0	1 0	2	0 1
Volume Module:												
Base Vol:	35	90	34	449	136	100	128	826	53	82	741	537
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	35	90	34	449	136	100	128	826	53	82	741	537
Added Vol:	0	0	0	1	0	0	0	2	0	0	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	90	34	450	136	100	128	828	53	82	742	537
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	35	90	34	450	136	0	128	828	53	82	742	537
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	35	90	34	450	136	0	128	828	53	82	742	537
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	35	90	34	450	136	0	128	828	53	82	742	537
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.88	0.12	1.00	2.00	1.00
Final Sat.:	1450	1450	1450	1450	1450	1450	1450	2726	174	1450	2900	1450
Capacity Analysis Module:												
Vol/Sat:	0.02	0.06	0.02	0.31	0.09	0.00	0.09	0.30	0.30	0.06	0.26	0.37
Crit Volume:		90		450				441		82		
Crit Moves:		****		****				****		****		

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #2 PACIFIC / GROVE

****

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: D[33.2]

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1!	0	0	0 0 0	0	0	1 0 1	1	0	1 0 2	0	0
Volume Module:												
Base Vol:	30	0	39	0	0	0	0	1457	27	42	1198	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	39	0	0	0	0	1457	27	42	1198	0
Added Vol:	2	0	0	0	0	0	0	2	1	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	32	0	39	0	0	0	0	1459	28	42	1198	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	32	0	39	0	0	0	0	1459	28	42	1198	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	32	0	39	0	0	0	0	1459	28	42	1198	0
Critical Gap Module:												
Critical Gp:	6.8	6.5	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	2156	2755	744	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1487	xxxx	xxxxx
Potent Cap.:	41	19	357	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	448	xxxx	xxxxx
Move Cap.:	38	18	357	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	448	xxxx	xxxxx
Total Cap:	128	99	xxxxx	106	86	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	0.25	0.00	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.09	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	13.9	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	197	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	1.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	33.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	D	*	*	*	*	*	*	*	*	*	*
ApproachDel:		33.2		xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:		D		*			*			*		

****

Note: Queue reported is the number of cars per lane.

****

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #3 PACFIC / YANKEE HILL

Average Delay (sec/veh): 0.7 Worst Case Level Of Service: C[19.7]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	1	0	0	1		1	0	1	1	0		1	0	1	1	0	
Volume Module:																								
Base Vol:	0	0	0				26	0	55				22	1474	0				0	1185	11			
Growth Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
Initial Bse:	0	0	0				26	0	55				22	1474	0				0	1185	11			
Added Vol:	0	0	0				0	0	0				0	2	0				0	0	0			
PasserByVol:	0	0	0				0	0	0				0	0	0				0	0	0			
Initial Fut:	0	0	0				26	0	55				22	1476	0				0	1185	11			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Volume:	0	0	0				26	0	55				22	1476	0				0	1185	11			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	0	0				26	0	55				22	1476	0				0	1185	11			
Critical Gap Module:																								
Critical Gp:	7.5	6.5	6.9				6.8	6.5	6.9				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
FollowUpTim:	3.5	4.0	3.3				3.5	4.0	3.3				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	2113	2716	738				1973	2711	598				1196	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Potent Cap.:	29	21	360				54	21	445				579	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Move Cap.:	25	20	360				53	20	445				579	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Total Cap:	91	100	xxxxx				163	103	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Volume/Cap:	0.00	0.00	0.00				0.16	0.00	0.12				0.04	xxxx	xxxx				xxxx	xxxx	xxxx			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				xxxx	xxxx	0.4				0.1	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	14.2				11.5	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	*	*	*				*	*	B				B	*	*				*	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx		0	xxxxx			163	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				0.6	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				31.3	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
Shared LOS:	*	*	*				D	*	*				*	*	*				*	*	*			
ApproachDel:	xxxxxx						19.7						xxxxxx						xxxxxx					
ApproachLOS:	*						C						*						*					

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #4 PACFIC ACCESS

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: C[15.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	0	0	8	0	0	0	3	1486	11	13	1196	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	8	0	0	0	3	1486	11	13	1196	0
Added Vol:	0	0	1	0	0	0	0	0	2	3	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	9	0	0	0	3	1486	13	16	1196	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	9	0	0	0	3	1486	13	16	1196	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	9	0	0	0	3	1486	13	16	1196	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	750	1977	2733	598	1196	xxxx	xxxxx	1499	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	354	37	20	445	579	xxxx	xxxxx	443	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	354	35	19	445	579	xxxx	xxxxx	443	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	0.00	0.00	0.00	0.01	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.1	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.4	xxxxx	xxxx	xxxxx	11.2	xxxx	xxxxx	13.4	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	B	*	*	B	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		15.4			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		C			*			*			*	

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
Circular 212 Planning Method (Future Volume Alternative)

****

Intersection #5 PAcific St / American Way

****

Cycle (sec):	100	Critical Vol./Cap.(X):	0.756
Loss Time (sec):	0	Average Delay (sec/veh):	xxxxx
Optimal Cycle:	93	Level Of Service:	C

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0 1	0	1 0	0 1	0	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	151	79	136	17	38	63	81	1283	131	136	997	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	151	79	136	17	38	63	81	1283	131	136	997	25
Added Vol:	0	0	0	0	0	0	0	1	0	0	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	79	136	17	38	63	81	1284	131	136	999	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	79	136	17	38	63	81	1284	131	136	999	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	79	136	17	38	63	81	1284	131	136	999	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	151	79	136	17	38	63	81	1284	131	136	999	25
Saturation Flow Module:												
Sat/Lane:	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.37	0.63	1.00	0.38	0.62	1.00	1.81	0.19	1.00	1.95	0.05
Final Sat.:	1450	533	917	1450	546	904	1450	2632	268	1450	2829	71
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.01	0.07	0.07	0.06	0.49	0.49	0.09	0.35	0.35
Crit Volume:	151				101			708		136		
Crit Moves:	****				****			****		****		

****

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #6 GROVE / ACCESS

Average Delay (sec/veh): 1.5 Worst Case Level Of Service: A[8.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 1 0			0 1 0 0 0			0 0 0 0 0			0 0 1! 0 0		
Volume Module:												
Base Vol:	0	54	9	7	60	0	0	0	0	6	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	54	9	7	60	0	0	0	0	6	0	11
Added Vol:	0	0	2	1	0	0	0	0	0	1	0	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	54	11	8	60	0	0	0	0	7	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	54	11	8	60	0	0	0	0	7	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	54	11	8	60	0	0	0	0	7	0	13
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	65	xxxx	xxxxx	xxxx	xxxx	xxxxx	136	136	60
Potent Cap.:	xxxx	xxxx	xxxxx	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx	858	755	1006
Move Cap.:	xxxx	xxxx	xxxxx	1537	xxxx	xxxxx	xxxx	xxxx	xxxxx	855	751	1006
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	947	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	7.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	8.9	xxxxx
Shared LOS:	*	*	*	A	*	*	*	*	*	*	A	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			8.9		
ApproachLOS:	*			*			*			A		

Note: Queue reported is the number of cars per lane.

CUMULATIVE PLUS PROJECT (76 UNITS)
7571-01 TLA: QUARRY ROW SUBDIVISION

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 GROVE ST / CEDAR ST

Cycle (sec):	100	Critical Vol./Cap.(X):	0.334
Loss Time (sec):	0	Average Delay (sec/veh):	8.8
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	3	12	135	5	10	1	1	28	2	177	77	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	12	135	5	10	1	1	28	2	177	77	9
Added Vol:	0	0	2	0	0	0	0	0	0	1	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	12	137	5	10	1	1	28	2	178	77	9
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	3	12	137	5	10	1	1	28	2	178	77	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	12	137	5	10	1	1	28	2	178	77	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	3	12	137	5	10	1	1	28	2	178	77	9
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.08	0.90	0.31	0.63	0.06	0.03	0.91	0.06	0.68	0.29	0.03
Final Sat.:	16	66	751	220	441	44	24	685	49	533	231	27
Capacity Analysis Module:												
Vol/Sat:	0.18	0.18	0.18	0.02	0.02	0.02	0.04	0.04	0.04	0.33	0.33	0.33
Crit Moves:	****				****		****					****
Delay/Veh:	7.9	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	9.6	9.6	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.9	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	9.6	9.6	9.6
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.9			7.9			7.7			9.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.9			7.9			7.7			9.6	
LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5

Note: Queue reported is the number of cars per lane.